

December 2016

2016 European Goodwill Impairment Study

Introduction

In 2013, Duff & Phelps launched its inaugural study of goodwill impairments recognised by European companies. Now in its fourth edition, the 2016 European Goodwill Impairment Study (2016 Study) continues to examine general goodwill impairment trends across countries and industries within the European market. As with past editions, the analysis in the 2016 Study is focused on companies in the STOXX® Europe 600 Index, which is comprised of large, mid and small capitalisation companies across just under 20 countries of the European region.

The 2016 Study covers financial results of STOXX® Europe 600 Index members for the 2011–2015 calendar years. This period was characterised by economic uncertainty within Europe, with effects from the euro sovereign debt crisis dating back to 2010 still lingering. Nevertheless, European economies continued to heal in 2015 and signs of recovery were clearly evident in several countries.

The aggregate goodwill impairment amount rose in 2015 relative to the prior year, with certain economic trends – such as ultra-low interest rates and depressed energy prices – having a disproportionate impact on the Financials and Utilities industries. Together, these industries represented 63% of the total goodwill impairments in 2015.

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Introduction (continued)

The Eurozone strengthened its pace of economic recovery in 2015, assisted in part by an expansion of European Central Bank's (ECB) quantitative easing (QE) policies. Overall, the Eurozone economy grew by 2.0% in real terms, whereas the European Union expanded by 2.2% in 2015. While economic performance was uneven across countries, all Eurozone economies returned to growth in 2015, with the exception of Greece. At the same time, the United Kingdom experienced another year of solid performance, reaching 2.2% real growth in 2015, albeit substantially lower than the 3.1% achieved in 2014.*

The outlook for 2016 was dampened by a sharp fall in European equity markets in the early part of the year. Moreover, uncertainty over the foundation of the European Union itself increased, as the U.K. electorate surprised analysts and global markets by voting on 23 June 2016 to end its membership in the European Union (known as "Brexit").

Generally, economists expect a negative impact on both the United Kingdom and Eurozone economies, once Brexit is officially triggered (known as Article 50 of the Lisbon Treaty). Accordingly, European companies will need to carefully monitor business performance and adjust cash flow projections (and discount rate assumptions, where applicable) when performing goodwill impairment tests in the post-Brexit environment.

In fact, in late October 2016, the European Securities and Markets Authority (ESMA) issued a statement defining its enforcement priorities for 2016 financial statements, where it called for a particular focus on the impact of Brexit. ESMA encouraged issuers to assess and disclose the risks and effects that Brexit may have on their business activities. ESMA underscored the potential need to reassess the assumptions used in the valuation of assets and liabilities and, if appropriate, to recognise related impairment losses. The application of both IAS 36 *Impairment of Assets* and IFRS 13 *Fair Value Measurement* was specifically highlighted.†

Economic uncertainty in Europe has been one of the factors leading to standard setters' and regulators' increased focus on goodwill and goodwill impairments. The International Accounting Standards Board (IASB) is currently evaluating the existing model of accounting for goodwill, as a result of its post-implementation review (PIR) of IFRS 3 *Business Combinations*. Also arising from the IFRS 3 PIR, the IASB commenced a project to clarify the definition of a business, which will directly impact the type of acquisitions giving rise to recorded goodwill in financial statements. In addressing the above projects, the IASB has taken a collaborative approach with the U.S. standards setter, the Financial Accounting Standards Board (FASB), in order to reduce any divergence in the business combination standards and bring their respective impairment standards closer together.

* Growth in real gross domestic product (GDP) based on latest estimates at the time of writing. Source data retrieved on 21 November 2016, from <http://ec.europa.eu/eurostat>.

† ESMA's Public Statement "European common enforcement priorities for 2016 financial statements", dated 28 October 2016, is available here: https://www.esma.europa.eu/sites/default/files/library/esma-2016-1528_european_common_enforcement_priorities_for_2016.pdf.

The STOXX® Europe 600 Index is derived from the STOXX® Europe Total Market Index and is a subset of the STOXX® Global 1800 Index. The index is weighted according to free-float market capitalisation. For more information, see http://www.stox.com/indices/index_information.html?symbol=SXXP.

§ The number of events is broadly defined in this study: it captures whether a company has recorded any goodwill impairments in any given year (i.e., either "yes" or "no"). Thus, while a company could have recorded multiple goodwill impairments during a calendar year, it will still be considered a single event for purposes of this study.

From a geography standpoint, differences in aggregate impairment amounts may be driven in part by the composition of the index. For example, in 2015 the United Kingdom had a significant weighting in the STOXX® Europe 600 Index, with U.K.-based companies representing approximately 31% of the index members.

Highlights of the 2016 Study

The 2016 Study focused on financial data for companies comprising the STOXX® Europe 600 Index in each of the years from 2011 through 2015.‡ The procedures described in Appendix 1 were undertaken to arrive at the final dataset, which was used to calculate all ratios and summary statistics throughout the 2016 Study. Below are the main findings:

- European companies in the STOXX® Europe 600 Index recognised a total of €37.1 billion of goodwill impairments in calendar year 2015, representing an increase of approximately 26% from the €29.4 billion recorded in 2014. The aggregate number of impairment events decreased from 160 in 2014 to 146 in 2015. This means that the magnitude of each impairment event has increased, with the average goodwill impairment amount per event increasing by 38%, from €184 million in 2014 to €254 million in 2015.§
- The increase in aggregate goodwill impairments was driven primarily by a few very large impairments in the Financials and, to a lesser extent, in the Utilities industries. Should Financials be excluded from the aggregate goodwill impairment amount in both 2014 and 2015, the total impairment would stay flat at €23 billion.
- From an industry viewpoint, Financials returned to first place in 2015 (also topping the list in 2013) with the highest aggregate goodwill impairment at €14.3 billion. In general, the effect of ECB's QE policies, conducive to an environment of ultra-low or even negative interest rates, has substantially hurt margins of European banks in 2015. An adverse regulatory and litigation environment was also a contributor to impairments.
- Utilities followed in second place with an aggregate impairment amount of €9.0 billion, a fourfold increase from the 2014 level of €2.1 billion, partly driven by a low oil and gas price environment. Notable decreases in the aggregate amount of goodwill impairment included Telecommunication Services, with an 84% drop (or €7.5 billion) and Consumer Staples, with a 42% drop (or €1.1 billion).
- From a geographic perspective, Germany was the country with the highest aggregate amount of goodwill impairments in 2015 at €11.6 billion. This represented an eightfold increase in the amount of goodwill impairment relative to 2014 level of €1.4 billion, but the top two impairment events accounted for 90% of the total German impairment amount. Conversely, the United Kingdom, which had the second-highest aggregate impairment amount (€7.7 billion), saw a significant decrease (of €4.7 billion or 38%) from 2014.¶

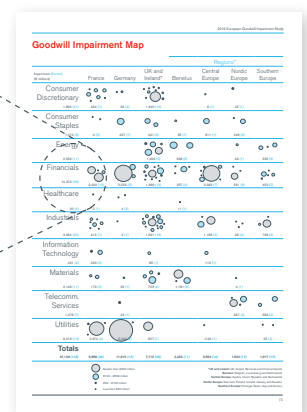
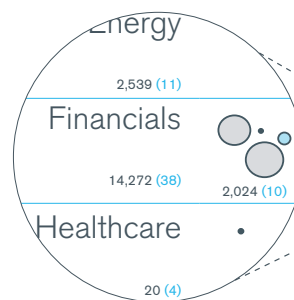
Introduction (continued)

- The median market-to-book ratio for companies that recognised a goodwill impairment in 2015 was 1.8x, compared with 2.5x for all companies in the 2016 Study. While the market-to-book ratio for companies that recognized a goodwill impairment has remained constant from 2014, this is still a significant improvement from the levels observed of 1.1x to 1.2x, at the height of the euro sovereign debt crisis. On the other hand, the market-to-book ratio for the companies in the STOXX® Europe 600 Index has improved substantially during 2015, consistent with the performance exhibited by the index, which achieved total returns of approximately 10%. Nevertheless, the performance of individual companies in particular industries and specific countries within the index has varied significantly.
- More goodwill has been added to STOXX® Europe 600 companies' balance sheets in 2015 (€104 billion) than in any other year covered in our studies (starting in 2010), reflecting strong M&A activity in 2015 for certain countries (e.g., France, United Kingdom) and industries (e.g., Healthcare, Industrials).

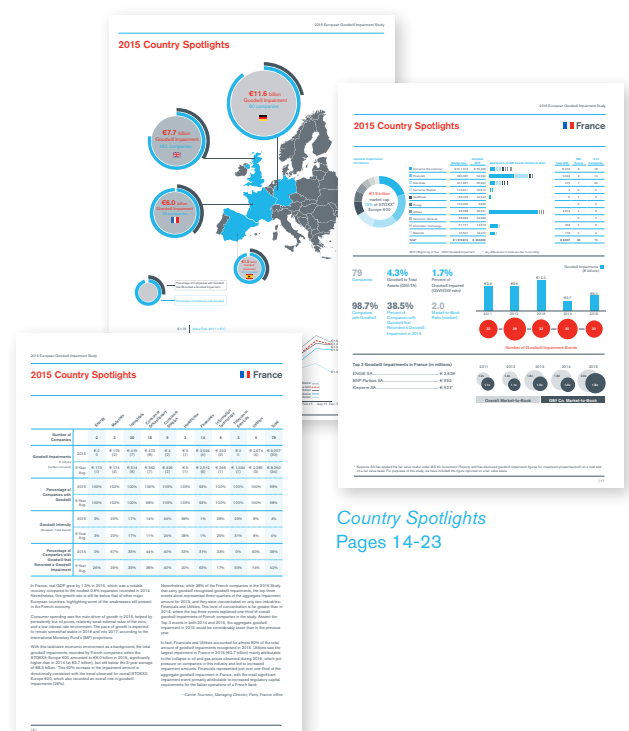
Additional Features in the 2016 Study

The 2016 Study also includes the following:

- Goodwill Impairment Map:** This infographic provides a visual depiction of the concentration and magnitude of goodwill impairments for selected countries and geographic regions within Europe, and by industries within those geographies.
- Country Spotlights:** These provide an in-depth focus on various goodwill-related metrics and statistics for each featured country, along with the top three companies that recognised the highest amount of goodwill impairment for the calendar year. In the 2015 Study we introduced country-specific spotlights for France, Germany, and the United Kingdom. Spain is newly-featured in the 2016 Study as an additional country spotlight.



Goodwill Impairment Map
Page 5



Country Spotlights
Pages 14-23

Goodwill Landscape

The graphic below captures the evolution of goodwill from 2011-2015 for the companies within the STOXX® Europe 600 Index used in the 2016 Study.

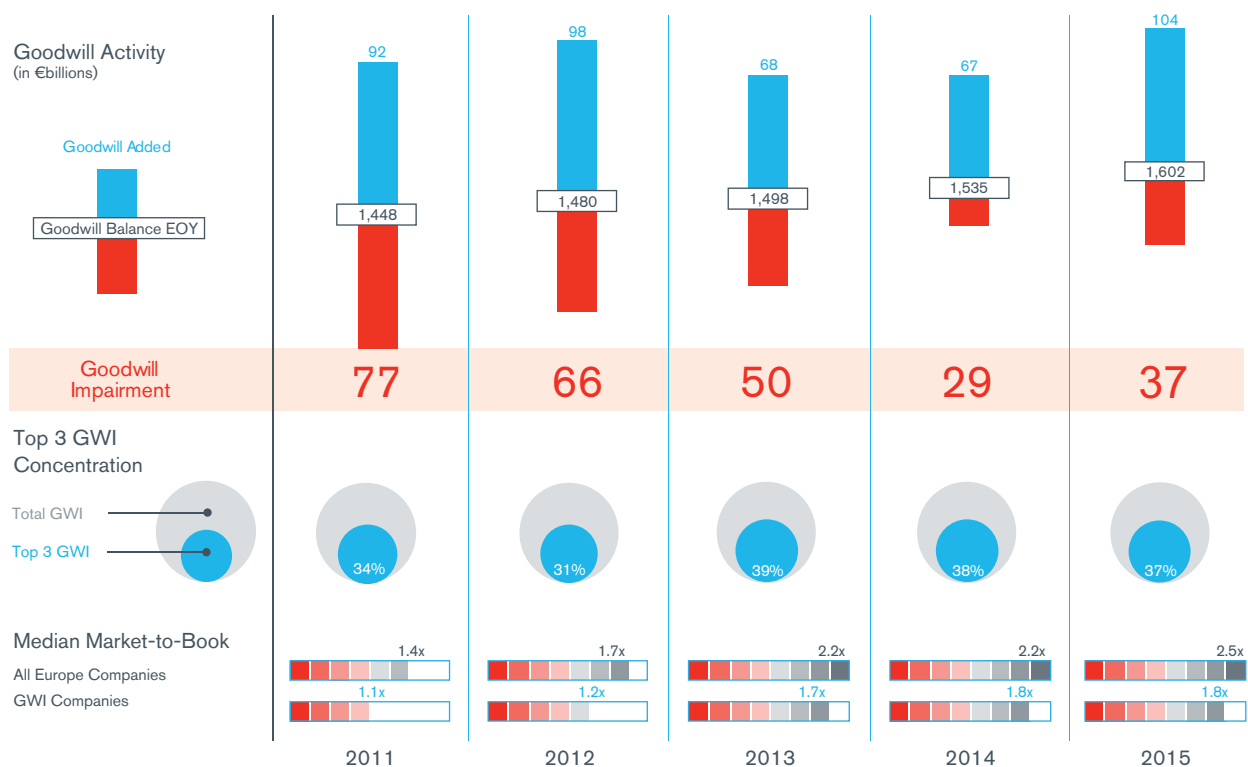
The top panel of the graphic shows European goodwill activity, comparing the aggregate amount of goodwill added to the balance sheets during the year (amounts in blue font) compared with goodwill impairments (GWI) taken during the year (amounts in red font). The end-of-year (EOY) aggregate goodwill balance is shown on the sliding scale. Overall, more goodwill has been added by European companies than has been impaired over the five-year period. For example, in 2015, €104 billion of goodwill was added to the balance sheets of companies included in the 2016 Study and €37 billion of goodwill was impaired, resulting in a net increase in goodwill of €67 billion. Over the five-year period, aggregate goodwill impairments were highest in 2011 at €77 billion.

A limited number of events can have a dramatic effect on the annual impairment amounts. This is highlighted by the concentration of goodwill impairment amounts recorded in the top three impairment events, as shown in the middle panel. The top three events accounted for 30-40% of all goodwill impairments across the five years studied.

Lastly, although not a sole or definitive indicator of impairment, market capitalisation should not be ignored during a goodwill impairment

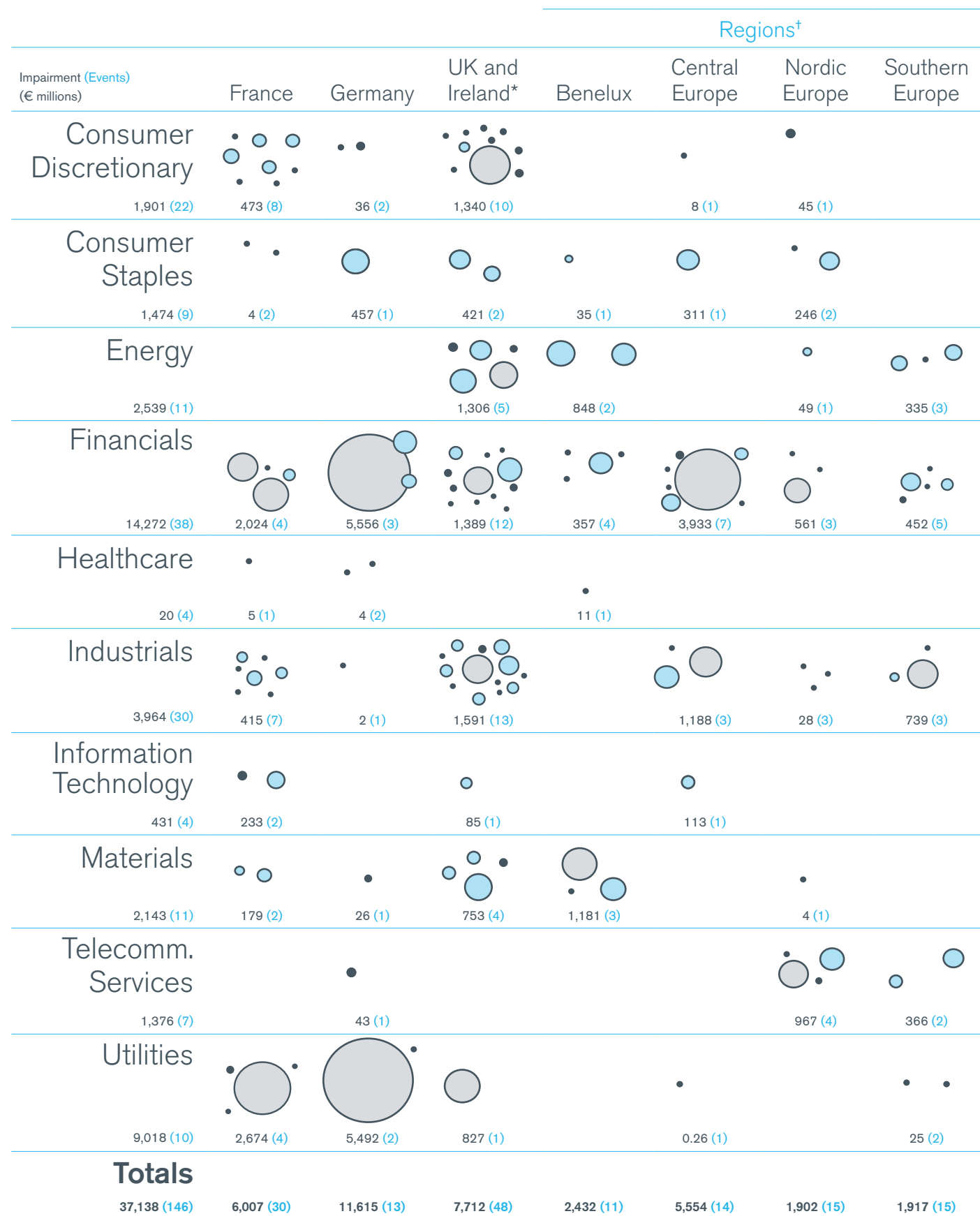
test. Median market-to-book ratios* for all companies included in the 2016 Study, as well as for those companies that recorded a goodwill impairment, are shown in the bottom panel of the graphic. As expected, companies recognising goodwill impairments during each year will exhibit lower market-to-book ratios relative to the overall group of companies. Generally, market-to-book ratios have improved since 2011, but the gap between overall market-to-book ratios and those of GWI companies seems to be expanding over time, reaching a high point in 2015.

When examining the trend from 2014 to 2015, both similarities and differences come to light. For instance, the top three GWI concentration remains stable at close to 40%. Market-to-book ratios of GWI companies remain the same (at 1.8x), while ratios for overall STOXX® Europe 600 companies have improved from the prior year (from 2.2x to 2.5x). More goodwill has been added to STOXX® Europe 600 companies' balance sheets in the most recent calendar year (€104 billion in 2015) than in any other year, reflecting strong M&A activity in 2015 for certain countries and industries. This was accompanied by an increase in the amount of goodwill impaired in 2015 to €37 billion, representing approximately a one-fourth increase over the amount impaired in 2014 of €29 billion. The aggregate picture is consistent with the overall trend in Europe, as certain industries continue to struggle amidst a modest and uneven economic recovery.



* The market-to-book ratio is calculated as a company's market capitalisation divided by its reported book value of equity.

Goodwill Impairment Map



*UK and Ireland: UK, Ireland, Bermuda and Channel Islands
 † Benelux: Belgium, Luxembourg and Netherlands
 Central Europe: Austria, Czech Republic and Switzerland
 Nordic Europe: Denmark, Finland, Iceland, Norway and Sweden
 Southern Europe: Portugal, Spain, Italy and Greece

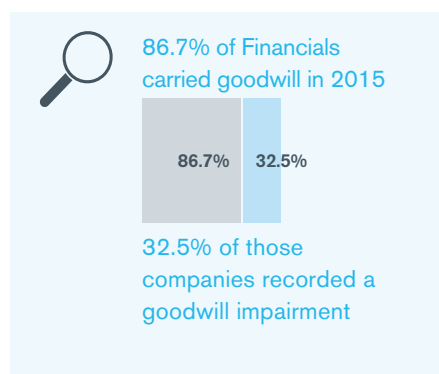
Summary Statistics by Industry and Country

(Tables 1 and 2)

Tables 1 and 2 on the following pages summarise the annual amount of goodwill impairments and the number of goodwill impairment events by industry and country, respectively, occurring between 2011 and 2015.* The tables also provide the proportion of companies within each industry or country that carry goodwill and the subset of those that recorded a goodwill impairment.† This format allows for a ready comparison of data across industries and countries over time.

Industries and countries are listed in descending order of their total goodwill impairment amounts for 2015. For example, in Table 1, Financials tops the industry list with its €14.3 billion aggregate goodwill impairment, whereas in Table 2, Germany heads the country list with its aggregate goodwill impairment of €11.6 billion.

Additionally, the graphs on the right of Tables 1 and 2 provide a quick comparison of (i) the preponderance of companies with goodwill within each industry or country in 2015 and (ii) the proportion of those companies that recorded a goodwill impairment. For example, the top row of Table 1 shows:



Goodwill Impairments

In Tables 1 and 2, the *first row* of data for each industry or country presents the annual amounts of goodwill impairments (in € billions), immediately followed by the number of impairment events (shown in brackets). In general, 2015 saw an approximate 26% increase in the aggregate amount of goodwill impairments, from €29.4 billion in 2014 to €37.1 billion in 2015. The aggregate number of impairment events decreased 9%, from 160 in 2014 to 146 in 2015. As a result, the average goodwill impairment amount per event increased by 38%, from €184 million in 2014 to €254 million in 2015.

The increase in aggregate goodwill impairments was driven primarily by a few very large impairments in the Financials and, to a lesser extent, in the Utilities industries. Should Financials be excluded from the aggregate goodwill impairment amount in both 2014 and 2015, the total impairment would stay flat at €23 billion. For perspective, Financials alone accounted for nearly 40% of total goodwill impairment in 2015.

From an industry viewpoint (see Table 1), Financials and Industrials saw the greatest number of impairment events in 2015 at 38 and 30, respectively. In terms of aggregate goodwill impairment amounts, Financials topped the list again in 2015 at €14.3 billion (previously in first place in 2013), more than double the 2014 level of €6.7 billion. In general, the effect of ECB QE policies, conducive to an environment of ultra-low or even negative interest rates, has substantially hurt margins of European banks in 2015. An adverse regulatory and litigation environment, especially in the United States, also contributed to some of the larger Financials goodwill impairments for the year.

Utilities followed in second place with an aggregate impairment of €9.0 billion, a fourfold increase from the 2014 level of €2.1 billion; however, this was largely driven by the Top 2 impairment events for this industry in 2015. Industrials reached third place at €4.0 billion, with an approximately 40% increase from the €2.8 billion recorded in 2014. Notable decreases in the aggregate amount of goodwill impairments included Telecommunication Services, with an 84% plunge (or €7.5 billion), and Consumer Staples, with a 42% drop (or €1.1 billion). Goodwill Impairments in Information Technology and Healthcare declined to negligible amounts in 2015.

Apart from this, the overall decline in the number of goodwill impairments events is broadly consistent with the economic trends seen in Europe during 2015. European economies continued to heal from the effects of both the 2008 global financial crisis and the ensuing Euro sovereign debt crisis, with signs of recovery seen in most countries. By the end of 2015, the Eurozone economy had been expanding for two and a half years, although real GDP (gross domestic product adjusted for the impact of inflation) barely surpassed its pre-crisis peak recorded in early 2008.

The Eurozone strengthened its pace of economic recovery in 2015, assisted in part by an expansion of the ECB QE policies. Overall, the Eurozone economy grew by 2.0% in real terms in 2015, whereas the European Union expanded by 2.2%. Eurozone economies showing very strong performance in 2015 included, for example, Ireland and Spain, while the Netherlands and Germany also experienced solid growth. Other economies, including Austria, Finland, and Italy continued to struggle in 2015. Nevertheless, all Eurozone economies returned to growth in 2015, with the exception of Greece.

* The information covering the period between 2011 and 2014 was carried forward from the 2015 Study.

† Appendix 1 describes the company base set selection and methodology used to generate the data in Tables 1-4 of this report.

The United Kingdom had another year of solid performance, reaching 2.2% real GDP growth in 2015, after a slow start to the year. However, this was substantially lower than the 3.1% achieved in 2014.

From a geographic perspective (see Table 2), Germany was the country with the highest aggregate amount of goodwill impairment (€11.6 billion) in 2015. While this represented an eightfold increase in the amount of goodwill impairments, the number of impairment events declined by almost 20% relative to 2014. In fact, the Top 2 impairment events accounted for 90% of the total goodwill impairments for Germany in 2015. Absent these two events, the aggregate goodwill impairment for Germany would have declined relative to 2014.

The United Kingdom had the second highest aggregate impairment amount (€7.7 billion) in 2015; however, this represented a 38% decline (or €4.7 billion) in the amount of goodwill impairment relative to 2014. This also represented the steepest absolute drop in goodwill impairment of all the countries displayed.

In 2015, all countries saw an increase in aggregate goodwill impairment, with the exception of the United Kingdom, Italy, and certain countries included in the “Other” category.‡

Percentage of Companies that Recorded a Goodwill Impairment

The *second row* in Tables 1 and 2 indicates the proportion of all companies within each industry or country that recorded a goodwill impairment. Across the entire 2016 Study (displayed in the Total row of Tables 1 and 2), the average proportion of companies recording an impairment loss declined steadily from a peak of 30.4% in 2012, down to the 2015 level of 24.8%, the lowest in five years.

In 2015, Energy had the largest percentage of companies that impaired goodwill (47.8%) for a second consecutive year, followed by Utilities (41.7%). From a geographic standpoint, France had the largest percentage of companies that impaired goodwill (38.0%), followed by Spain (32.1%).

Percentage of Companies with Goodwill

Since companies that do not carry goodwill on their balance sheets are not exposed to a goodwill impairment, it is more meaningful to consider the proportion of companies with goodwill within each respective industry or country, which is provided in the *third row* of Tables 1 and 2. In 2015, 90.3% of all the companies included in the 2016 Study carried goodwill on their balance sheets. The percentage of companies with goodwill remained relatively consistent from 2011 to 2015.

From an industry perspective, Industrials had the highest percentage of companies with goodwill in any given year over the 2011-2014 period (between 95% and 97%), but in 2015 Telecommunications Services took the top spot at 95.7%. On a relative basis, Consumer Staples tended to have the lowest average proportion (83%) over the five-year period, although other industries registered the lowest proportion in some of the years.

Geographically, for the second consecutive year, Italy had the highest percentage in 2015 of companies with goodwill (100%), closely followed by France (98.7%), whereas the United Kingdom had the lowest percentage (83.6%).

Percentage of Companies with Goodwill Recording a Goodwill Impairment

The *final (fourth) row* in Tables 1 and 2 indicates the percentage of companies with goodwill that recorded a goodwill impairment. Overall, the average impairment percentages across all observed companies peaked at 34.8% in 2012, and have steadily declined since, down to 27.5% in 2015.

For a second consecutive year in 2015, Energy had the largest percentage of companies with goodwill on their balance sheets that impaired goodwill (55.0%), followed by Utilities (45.5%). Geographically, France had the largest percentage of companies with goodwill that impaired goodwill (38.5%), followed by Spain (33.3%).

Considering trends over time, Telecommunication Services exhibited the highest overall percentage of companies with goodwill that impaired goodwill during the five-year period, peaking at 63.2% in 2012. From a geographic perspective, Italy had the highest overall percentage of companies impairing goodwill in 2011 (50.0%), while France had the highest overall 5-year average (42.4%).

‡ In 2015, 26 companies (out of a total of 92) grouped in the “Other” country category recognised aggregate goodwill impairments of €3.6 billion (see Table 2). In particular, the top four impairments recorded by companies based in Luxembourg, Denmark, and Belgium comprised approximately 94% (€3.4 billion) of the total. The countries grouped in the “Other” category throughout the period covered in the 2016 Study are Austria, Belgium, Czech Republic, Denmark, Finland, Greece, Ireland, Luxembourg, Malta, Norway, and Portugal.

2015 Goodwill Impairment (Table 1)

	2011	2012	2013	2014	2015		
	Goodwill Impairments: € billions (number of events)					Companies with GW	Percent Recording GWI
	Percent of Total Companies that Recorded GWI						
	Percent of Companies with Goodwill						
	Percent of Companies with Goodwill that Recorded GWI						
(Companies)							
Financials	38.7 (52)	16.1 (57)	17.2 (44)	6.7 (48)	14.3 (38)	86.7%	32.5%
	38.2%	42.5%	31.7%	33.3%	28.1%		
	84.6%	81.3%	81.3%	86.1%	86.7%		
(135)	45.2%	52.3%	38.9%	38.7%	32.5%		
Utilities	2.2 (10)	3.2 (6)	9.0 (12)	2.1 (8)	9.0 (10)	91.7%	45.5%
	35.7%	24.0%	48.0%	33.3%	41.7%		
	85.7%	92.0%	92.0%	91.7%	91.7%		
(24)	41.7%	26.1%	52.2%	36.4%	45.5%		
Industrials	3.5 (30)	3.1 (32)	2.7 (32)	2.8 (31)	4.0 (30)	94.5%	25.0%
	26.8%	28.1%	27.1%	25.6%	23.6%		
	97.3%	96.5%	94.9%	95.0%	94.5%		
(127)	27.5%	29.1%	28.6%	27.0%	25.0%		
Energy	0.6 (5)	1.4 (6)	1.1 (5)	2.3 (13)	2.5 (11)	87.0%	55.0%
	15.2%	17.1%	15.2%	48.1%	47.8%		
	81.8%	88.6%	93.9%	81.5%	87.0%		
(23)	18.5%	19.4%	16.1%	59.1%	55.0%		
Materials	6.4 (10)	14.2 (17)	7.5 (17)	0.4 (10)	2.1 (11)	88.7%	23.4%
	17.5%	29.8%	30.4%	18.2%	20.8%		
	80.7%	82.5%	83.9%	89.1%	88.7%		
(53)	21.7%	36.2%	36.2%	20.4%	23.4%		
Consumer Discretionary	1.7 (17)	1.2 (23)	1.7 (19)	1.6 (24)	1.9 (22)	90.7%	28.2%
	20.7%	28.0%	22.4%	27.6%	25.6%		
	87.8%	90.2%	85.9%	89.7%	90.7%		
(86)	23.6%	31.1%	26.0%	30.8%	28.2%		
Consumer Staples	2.7 (11)	2.2 (16)	1.3 (16)	2.6 (13)	1.5 (9)	86.4%	23.7%
	23.4%	32.0%	32.0%	27.1%	20.5%		
	83.0%	82.0%	80.0%	83.3%	86.4%		
(44)	28.2%	39.0%	40.0%	32.5%	23.7%		
Telecomm. Services	20.4 (11)	23.4 (12)	8.2 (9)	8.9 (6)	1.4 (7)	95.7%	31.8%
	52.4%	57.1%	36.0%	28.6%	30.4%		
	95.2%	90.5%	92.0%	90.5%	95.7%		
(23)	55.0%	63.2%	39.1%	31.6%	31.8%		
Information Technology	1.1 (3)	1.4 (5)	0.6 (5)	1.3 (3)	0.4 (4)	94.1%	12.5%
	8.8%	14.7%	18.5%	10.3%	11.8%		
	88.2%	82.4%	92.6%	96.6%	94.1%		
(34)	10.0%	17.9%	20.0%	10.7%	12.5%		
Healthcare	0.0 (2)	0.2 (5)	0.4 (3)	0.8 (4)	0.0 (4)	89.7%	11.4%
	5.4%	13.9%	9.1%	11.4%	10.3%		
	91.9%	91.7%	93.9%	94.3%	89.7%		
(39)	5.9%	15.2%	9.7%	12.1%	11.4%		
Total*	77.2 (151)	66.4 (179)	49.6 (162)	29.4 (160)	37.1 (146)	90.3%	27.5%
	25.7%	30.4%	27.4%	27.1%	24.8%		
	87.9%	87.6%	87.6%	89.7%	90.3%		
(588)	29.3%	34.8%	31.3%	30.2%	27.5%		

* Any differences in totals are due to rounding.

2015 Goodwill Impairment (Table 2)

	2011		2012		2013		2014		2015		
	Goodwill Impairments: € billions (number of events)										
(Companies)	Percent of Total Companies that Recorded GWI										
	Percent of Companies with Goodwill										
	Percent of Companies with Goodwill that Recorded GWI										
						Companies with GW	Percent Recording GWI				
Germany	4.1 (15)	6.0 (18)	2.9 (17)	1.4 (16)	11.6 (13)	90.0%	24.1%				
	26.8%	30.5%	28.8%	27.6%	21.7%						
	83.9%	84.7%	89.8%	94.8%	90.0%						
(60)	31.9%	36.0%	32.1%	29.1%	24.1%						
United Kingdom	16.0 (35)	23.7 (38)	15.0 (48)	12.4 (38)	7.7 (47)	83.6%	30.7%				
	20.8%	22.5%	26.2%	20.4%	25.7%						
	78.6%	78.1%	78.7%	82.3%	83.6%						
(183)	26.5%	28.8%	33.3%	24.8%	30.7%						
France	9.9 (32)	9.6 (39)	12.0 (32)	3.7 (35)	6.0 (30)	98.7%	38.5%				
	40.0%	46.4%	40.0%	43.8%	38.0%						
	98.8%	97.6%	97.5%	98.8%	98.7%						
(79)	40.5%	47.6%	41.0%	44.3%	38.5%						
Switzerland	1.5 (7)	3.3 (12)	0.5 (9)	2.7 (8)	5.5 (10)	84.3%	23.3%				
	15.6%	25.5%	18.8%	16.7%	19.6%						
	91.1%	89.4%	83.3%	81.3%	84.3%						
(51)	17.1%	28.6%	22.5%	20.5%	23.3%						
Spain	2.4 (7)	1.0 (7)	0.5 (8)	0.0 (5)	1.5 (9)	96.4%	33.3%				
	23.3%	23.3%	30.8%	18.5%	32.1%						
	93.3%	90.0%	84.6%	92.6%	96.4%						
(28)	25.0%	25.9%	36.4%	20.0%	33.3%						
Italy	36.9 (15)	11.2 (11)	16.0 (8)	2.9 (7)	0.4 (4)	100%	15.4%				
	50.0%	37.9%	29.6%	26.9%	15.4%						
	100.0%	96.6%	96.3%	100.0%	100.0%						
(26)	50.0%	39.3%	30.8%	26.9%	15.4%						
Sweden	0.7 (6)	1.0 (9)	0.5 (10)	0.3 (7)	0.4 (6)	87.5%	17.1%				
	16.7%	24.3%	25.0%	18.4%	15.0%						
	83.3%	81.1%	85.0%	86.8%	87.5%						
(40)	20.0%	30.0%	29.4%	21.2%	17.1%						
Netherlands	1.9 (6)	4.0 (12)	0.9 (10)	0.1 (8)	0.4 (1)	96.6%	3.6%				
	19.4%	37.5%	30.3%	25.0%	3.4%						
	90.3%	93.8%	97.0%	93.8%	96.6%						
(29)	21.4%	40.0%	31.3%	26.7%	3.6%						
Other	3.8 (28)	6.6 (33)	1.4 (20)	5.9 (36)	3.6 (26)	94.6%	29.9%				
	25.2%	32.7%	21.1%	37.5%	28.3%						
	91.0%	93.1%	93.7%	93.8%	94.6%						
(92)	27.7%	35.1%	22.5%	40.0%	29.9%						
Total*	77.2 (151)	66.4 (179)	49.6 (162)	29.4 (160)	37.1 (146)	90.3%	27.5%				
	25.7%	30.4%	27.4%	27.1%	24.8%						
	87.9%	87.6%	87.6%	89.7%	90.3%						
(588)	29.3%	34.8%	31.3%	30.2%	27.5%						

* Any differences in totals are due to rounding.

Summary Statistics by Industry and Country (Tables 3 and 4)

Tables 1 and 2 captured the total amount of goodwill impairment and the frequency of events by industry and country. In Tables 3 and 4, the focus shifts to the industries' and countries' (i) relative importance of goodwill to the overall asset base (goodwill intensity); (ii) the magnitude of annual impairment relative to the carrying amount of goodwill; and (iii) the magnitude of such impairment in relation to total assets (the latter two being measures of loss intensity).

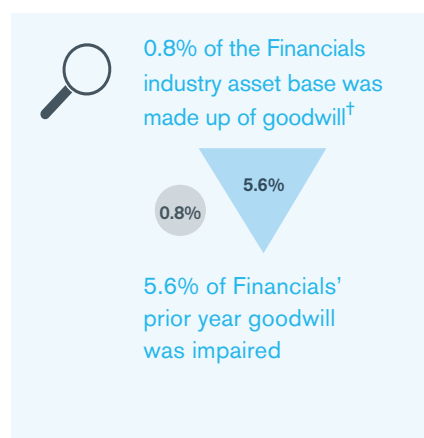
Goodwill intensity, defined here as goodwill as a percentage of total assets (GW/TA), measures the proportion of an industry's or country's total assets represented by goodwill.* Because goodwill arises as a result of a business combination, goodwill intensity is greater in industries and countries with significant merger and acquisition (M&A) activity.

The first loss intensity measure, goodwill impairment as a percentage of goodwill (GWI/GW), indicates the magnitude of goodwill impairments. In other words, it measures the proportion of an industry's or country's goodwill that is impaired each year.

The second loss intensity measure, goodwill impairments as a percentage of total assets (GWI/TA), quantifies the percentage of an industry's or a country's total asset base that was impaired.

		Intensity Measure	How?	Why?
Goodwill Intensity	Extent to which asset base includes goodwill	GW/TA	Goodwill as a percentage of total assets, measured at year-end	Indicates how significant goodwill is in relation to total assets
Loss Intensity (1)	Extent to which goodwill is affected by impairment	GWI/GW	Goodwill impairments (total) as a percentage of the prior year's total goodwill	Indicates how impairments impacted goodwill
Loss Intensity (2)	Extent to which the asset base is affected by impairment	GWI/TA	Goodwill impairments (total) as a percentage of the prior year's total assets	Indicates how impairments impacted total assets.

The graphs on the right of Tables 3 and 4 provide for a quick comparison of (i) goodwill as a percentage of total assets; and (ii) goodwill impairments as a percentage of goodwill. For example:

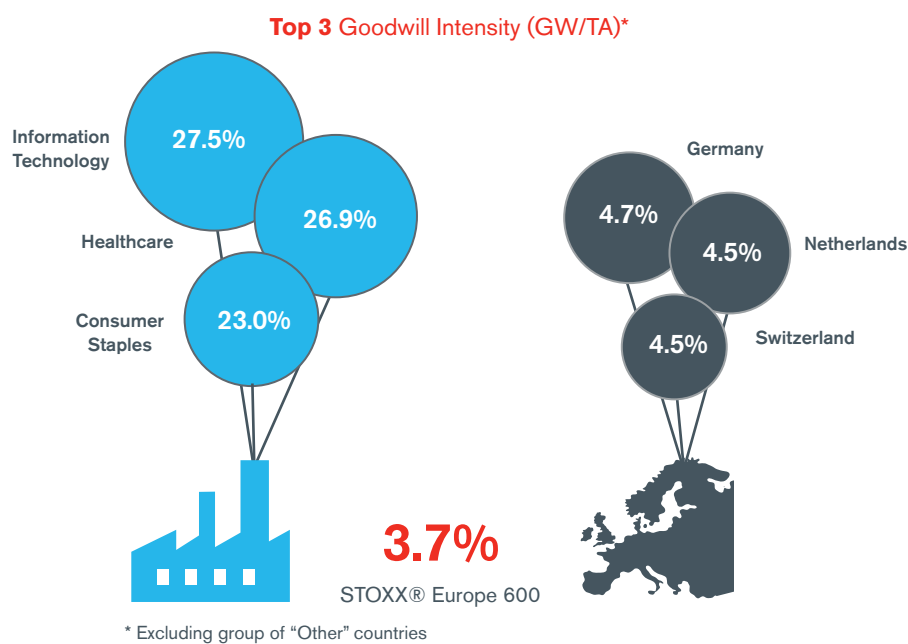


* Although the companies in the index may measure non-controlling interests associated with their partially-owned subsidiaries on a different basis (i.e. either at fair value or at the proportionate share of the acquiree's identifiable net assets), which impacts the amount of recognised goodwill, this analysis does not make adjustments for such differences.

† The significant size of balance sheets of financial services companies within the STOXX® Europe 600 Index partially explains why goodwill and goodwill impairments represent a negligible proportion of the asset base in the Financials industry. In fact, the impact of companies in the Financials industry is substantial in the overall study, because those companies comprise a significant proportion of the STOXX® Europe 600 Index. Excluding Financials from the 2015 total would result in an aggregate GW/TA ratio of 13.3%, rather than 3.6%. This effect is similar in other years.

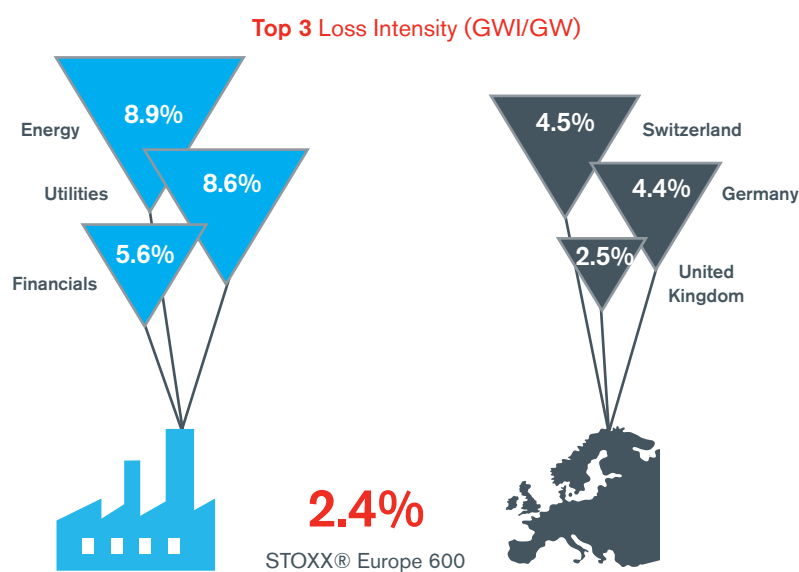
Goodwill Intensity

The *first row* in Tables 3 and 4 illustrates goodwill as a percentage of total assets (GW/TA) reported over time for each industry and country, with 2015 being highlighted specifically in the light gray circle on the graphics to the right in both Tables 3 and 4. Below, we have listed the top three industries (blue circles) and countries (dark gray circles) with the highest goodwill intensity, as compared to the overall study's 3.7% goodwill intensity.



Goodwill Impairment to Goodwill

The *second row* in Tables 3 and 4 represents the first measure of loss intensity (GWI/GW) recognised for each industry and country over the five-year period, with 2015 being highlighted specifically in the light blue triangle of the graphics to the right in both Tables 3 and 4. Below, we have listed the top three industries (blue triangles) and countries (dark gray triangles) with the highest loss intensity, as compared to the overall study's 2.4% loss intensity.



Goodwill Impairments to Total Assets

The *third row* in Tables 3 and 4 presents the second measure of loss intensity, goodwill impairments as a percentage of total assets (GWI/TA), for each industry and country, respectively.

2015 Goodwill Impairment (Table 3)

	2011	2012	2013	2014	2015	
	Goodwill Intensity (GW/TA) Loss Intensity (GWI/GW) Loss Intensity (GWI/TA)					
(Companies)						
Financials	0.8%	0.8%	0.8%	0.7%	0.8%	
	12.5%	6.3%	6.3%	2.7%	5.6%	
	0.1%	0.0%	0.1%	0.0%	0.0%	
(135)						
Utilities	9.2%	8.8%	8.0%	8.0%	7.5%	
	1.7%	2.5%	7.3%	2.0%	8.6%	
	0.2%	0.2%	0.6%	0.2%	0.7%	
(24)						
Industrials	15.7%	15.8%	15.7%	15.6%	15.5%	
	1.8%	1.5%	1.2%	1.3%	1.7%	
	0.3%	0.2%	0.2%	0.2%	0.3%	
(127)						
Energy	3.2%	2.8%	2.8%	2.3%	2.3%	
	1.8%	3.7%	3.2%	6.8%	8.9%	
	0.1%	0.1%	0.1%	0.2%	0.2%	
(23)						
Materials	10.1%	8.8%	9.1%	9.8%	10.5%	
	6.2%	13.9%	7.8%	0.4%	2.1%	
	0.7%	1.4%	0.7%	0.0%	0.2%	
(53)						
Consumer Discretionary	9.2%	9.7%	9.5%	11.6%	11.1%	
	1.8%	0.9%	1.2%	1.1%	1.0%	
	0.1%	0.1%	0.1%	0.1%	0.1%	
(86)						
Consumer Staples	22.6%	22.2%	23.0%	23.2%	23.0%	
	1.5%	1.1%	0.6%	1.2%	0.6%	
	0.3%	0.2%	0.1%	0.3%	0.1%	
(44)						
Telecomm. Services	25.1%	23.1%	21.3%	20.6%	20.1%	
	8.8%	11.1%	4.2%	5.3%	0.9%	
	2.4%	2.8%	1.0%	1.1%	0.2%	
(23)						
Information Technology	21.2%	23.4%	23.6%	28.1%	27.5%	
	2.7%	3.3%	1.3%	2.8%	0.7%	
	0.6%	0.7%	0.3%	0.7%	0.2%	
(34)						
Healthcare	24.9%	25.0%	25.4%	26.6%	26.9%	
	0.0%	0.1%	0.3%	0.6%	0.0%	
	0.0%	0.0%	0.1%	0.1%	0.0%	
(39)						
Total	3.4%	3.4%	3.5%	3.5%	3.7%	
	5.4%	4.6%	3.4%	2.1%	2.4%	
	0.2%	0.2%	0.1%	0.1%	0.1%	
(588)						

2015 Goodwill Impairment (Table 4)

	2011	2012	2013	2014	2015	
	Goodwill Intensity (GW/TA) Loss Intensity (GWI/GW) Loss Intensity (GWI/TA)					
(Companies)						
Germany	3.7%	4.2%	4.7%	4.8%	4.7%	
	2.1%	2.9%	1.2%	0.6%	4.4%	
	0.1%	0.1%	0.1%	0.0%	0.2%	
(60)						
United Kingdom	2.4%	2.4%	2.3%	2.5%	2.6%	
	6.0%	8.7%	5.4%	4.9%	2.5%	
	0.1%	0.2%	0.1%	0.1%	0.1%	
(183)						
France	4.4%	4.2%	4.2%	4.2%	4.3%	
	2.7%	2.5%	3.2%	1.1%	1.7%	
	0.1%	0.1%	0.1%	0.0%	0.1%	
(79)						
Switzerland	3.3%	3.4%	3.8%	4.0%	4.5%	
	1.6%	3.3%	0.5%	2.5%	4.5%	
	0.1%	0.1%	0.0%	0.1%	0.2%	
(51)						
Spain	3.3%	2.8%	2.8%	2.8%	2.7%	
	2.4%	1.0%	0.5%	0.0%	1.5%	
	0.1%	0.0%	0.0%	0.0%	0.0%	
(28)						
Italy	3.7%	3.5%	3.2%	2.8%	2.8%	
	23.5%	8.9%	12.5%	2.7%	0.5%	
	1.1%	0.3%	0.4%	0.1%	0.0%	
(26)						
Sweden	2.7%	2.7%	2.8%	2.8%	3.1%	
	1.6%	2.2%	1.1%	0.6%	0.9%	
	0.0%	0.1%	0.0%	0.0%	0.0%	
(40)						
Netherlands	3.6%	3.9%	4.0%	3.5%	4.5%	
	2.7%	5.4%	1.1%	0.1%	0.5%	
	0.1%	0.2%	0.0%	0.0%	0.0%	
(29)						
Other	3.8%	4.4%	5.1%	5.1%	6.1%	
	2.8%	4.6%	1.0%	4.2%	2.2%	
	0.1%	0.2%	0.0%	0.2%	0.1%	
(92)						
Total	3.4%	3.4%	3.5%	3.5%	3.7%	
	5.4%	4.6%	3.4%	2.1%	2.4%	
	0.2%	0.2%	0.1%	0.1%	0.1%	
(588)						

2015 Country Spotlights

Country Spotlights provide an in-depth focus on relevant goodwill-related metrics and statistics for four specific countries included in the 2016 Study: France, Germany, Spain, and United Kingdom. Each Country Spotlight displays a variety of data, including the top three companies in the 2016 Study that recognised the highest amount of goodwill impairment within each country for calendar year 2015.*

The guide below provides a brief description of the components of the Country Spotlights.

2015 Country Spotlights France

Goodwill Trends
Provides a snapshot of goodwill-related measures and ratios by industry within each featured country. Latest calendar-year (2015) results are displayed in the first row for each metric. The second row shows 5-year averages for the same metric, to illustrate how each industry within the country is trending.

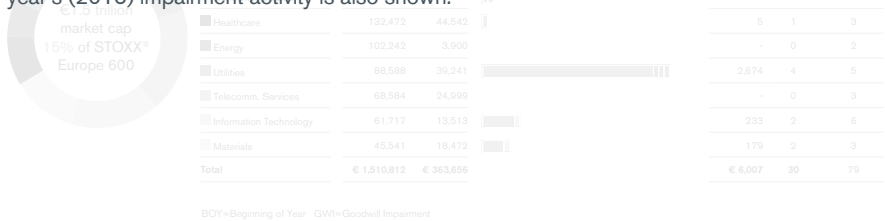
Summary Statistics
Depicts (i) Number of Companies; (ii) Goodwill Intensity (GW/TA); (iii) Loss Intensity (GWI/GW); (iv) Percent of Companies with Goodwill; (v) Percent of Companies with Goodwill that Recorded a Goodwill Impairment; and (vi) Median Market-to-Book ratio for calendar year 2015 for the featured country. These statistics are also displayed in Tables 2 and 4.

2015 Country Spotlights

France

Market Cap and Goodwill Impairment Activity by Industry

Represents the aggregate size of the companies within the featured country relative to the combined size of all the companies included in the 2016 Study (STOXX® Europe 600 Index), where size is measured in terms of market capitalisation. A further breakdown of market capitalisation by industry within the featured country, alongside the latest calendar year's (2015) impairment activity is also shown.

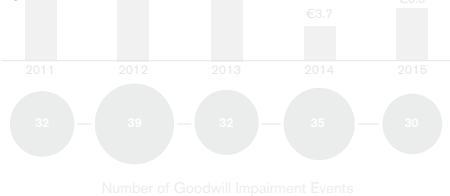


Summary Statistics

Depicts (i) Number of Companies; (ii) Goodwill Intensity (GW/TA); (iii) Loss Intensity (GWI/GW); (iv) Percent of Companies with Goodwill; (v) Percent of Companies with Goodwill that Recorded a Goodwill Impairment; and (vi) Median Market-to-Book ratio for calendar year 2015 for the featured country. These statistics are also displayed in Tables 2 and 4.

Impairment History

Shows annual goodwill impairment amounts and number of goodwill impairment events within the featured country over the last five years (2011-2015).



Top 3 Goodwill Impairments in the Country

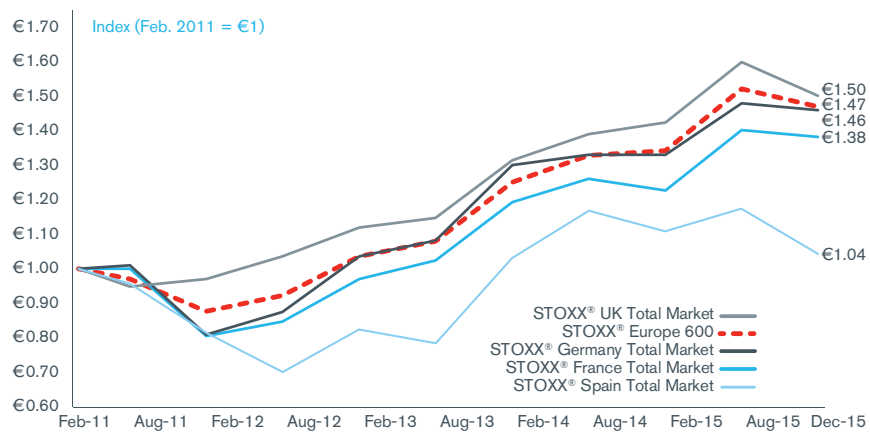
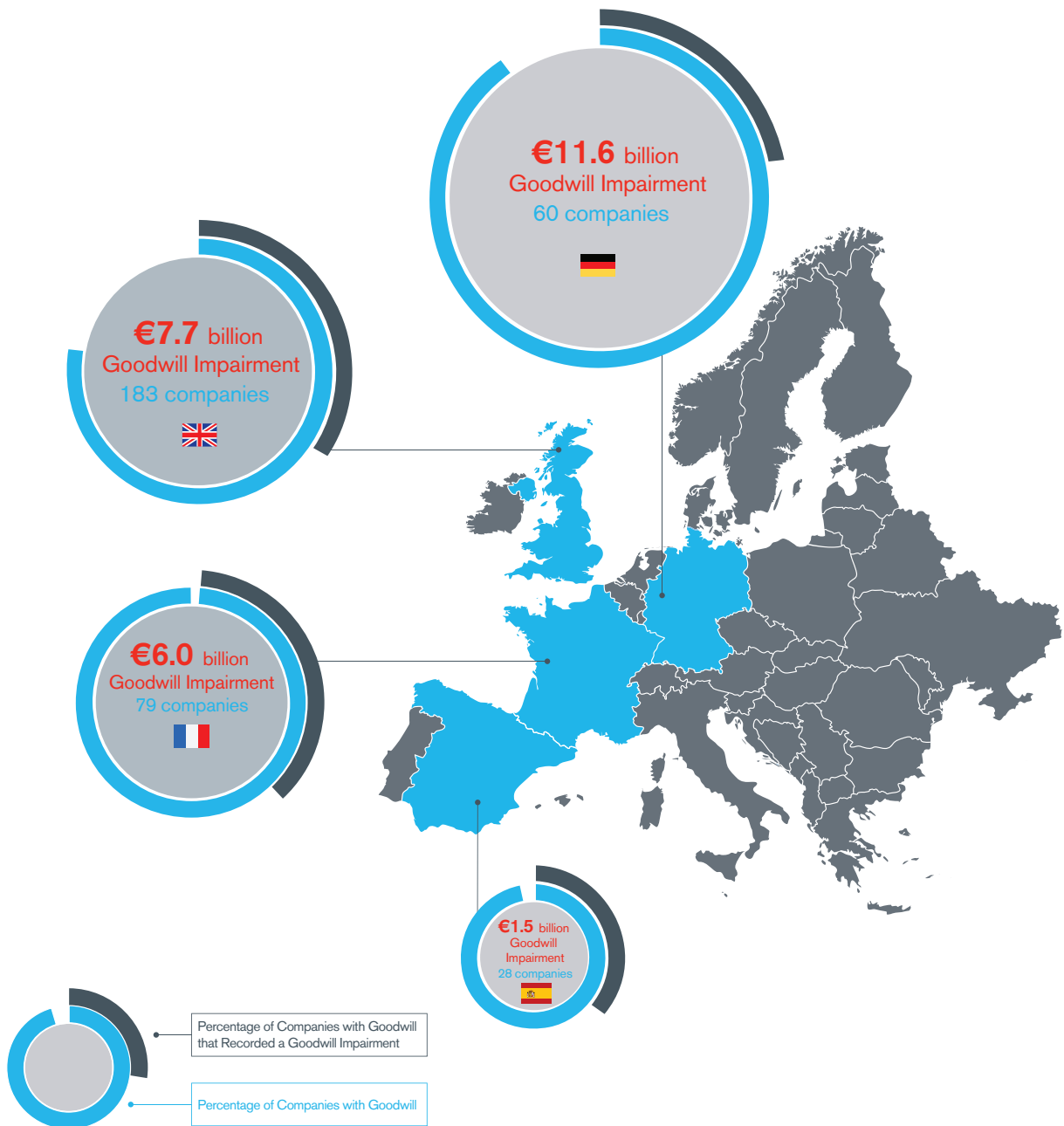
Highlights the top 3 goodwill impairments recorded in the featured country during calendar year 2015.

Country Market-to-Book Ratios

Displays the featured country's market-to-book ratios over a 5-year period (2011-2015). The ratios are shown for all companies in the 2016 Study within the featured country, as well as for those companies domiciled in the featured country that recorded a goodwill impairment. Although not predictive on its own, companies with a low market-to-book ratio may be at a greater risk of impairment.

* Financial data for all companies in the 2016 Study was adjusted, when applicable, to a calendar year end (rather than the most recent fiscal year end).

2015 Country Spotlights



2015 Country Spotlights



		Energy	Materials	Industrials	Consumer Discretionary	Consumer Staples	Healthcare	Financials	Information Technology	Telecomm. Services	Utilities	Total
Number of Companies		2	3	20	18	5	3	14	6	3	5	79
Goodwill Impairments € millions (number of events)	2015	€ 0 0	€ 179 (2)	€ 415 (7)	€ 473 (8)	€ 4 (2)	€ 5 (1)	€ 2,024 (4)	€ 233 (2)	€ 0 0	€ 2,674 (4)	€ 6,007 (30)
	5-Year Avg.	€ 173 (1)	€ 174 (2)	€ 514 (8)	€ 562 (7)	€ 426 (2)	€ 5 (1)	€ 2,512 (8)	€ 266 (1)	€ 1,334 (1)	€ 2,285 (3)	€ 8,250 (34)
Percentage of Companies with Goodwill	2015	100%	100%	100%	100%	100%	100%	93%	100%	100%	100%	99%
	5-Year Avg.	100%	100%	100%	98%	100%	100%	93%	100%	100%	100%	98%
Goodwill Intensity (Goodwill / Total Assets)	2015	2%	20%	17%	14%	24%	38%	1%	26%	29%	8%	4%
	5-Year Avg.	3%	23%	17%	11%	24%	38%	1%	25%	31%	8%	4%
Percentage of Companies with Goodwill that Recorded a Goodwill Impairment	2015	0%	67%	35%	44%	40%	33%	31%	33%	0%	80%	38%
	5-Year Avg.	26%	39%	39%	38%	40%	20%	63%	17%	50%	74%	42%

In France, real GDP grew by 1.3% in 2015, which was a notable recovery compared to the modest 0.6% expansion recorded in 2014. Nevertheless, this growth rate is still far below that of other major European countries, highlighting some of the weaknesses still present in the French economy.

Consumer spending was the main driver of growth in 2015, helped by persistently low oil prices, relative weakness of the euro, and a low interest rate environment. The pace of growth is expected to remain somewhat stable in 2016 and into 2017, according to International Monetary Fund's (IMF) projections.

With this lacklustre economic environment as a background, the total goodwill impairments recorded by French companies within the STOXX® Europe 600 amounted to €6.0 billion in 2015, significantly higher than in 2014 (at €3.7 billion), but still below the 5-year average of €8.3 billion. This 62% increase in the impairment amount is directionally consistent with the trend observed for overall STOXX® Europe 600, which also recorded an overall rise in goodwill impairments (26%).

Nevertheless, while 38% of the French companies in the 2016 Study that carry goodwill recognised goodwill impairments, the Top 3 events alone represented three-quarters of the aggregate impairment amount for 2015, and they were concentrated on only two industries: Financials and Utilities. This level of concentration is far greater than in 2014, where the Top 3 events explained one-third of overall goodwill impairments of French companies in the study. Absent the Top 3 events in both 2014 and 2015, the aggregate goodwill impairment in 2015 would be considerably lower than in the previous year.

In fact, Financials and Utilities accounted for almost 80% of the total amount of goodwill impairments recognised in 2015. Utilities saw the largest impairment in France in 2015 (€2.7 billion) mainly attributable to the collapse in oil and gas prices observed during 2015, which put pressure on companies in this industry and led to increased impairment amounts. Financials represented just over one-third of the aggregate goodwill impairment in France, with the most significant impairment event primarily attributable to increased regulatory capital requirements for the Italian operations of a French bank.

- Carine Tourneur, Managing Director, Paris, France office

2015 Country Spotlights

France

Goodwill impairments
(€ millions)



	Market Cap	Goodwill BOY	Distribution of GWI Events (Scaled to Size)	Total GWI	GWI Events	# of Companies
Consumer Discretionary	€ 311,012	€ 55,456		€ 473	8	18
Financials	282,387	54,294		2,024	4	14
Industrials	241,657	65,624		415	7	20
Consumer Staples	176,611	43,614		4	2	5
Healthcare	132,472	44,542		5	1	3
Energy	102,242	3,900		-	0	2
Utilities	88,588	39,241		2,674	4	5
Telecomm. Services	68,584	24,999		-	0	3
Information Technology	61,717	13,513		233	2	6
Materials	45,541	18,472		179	2	3
Total*	€ 1,510,812	€ 363,656		€ 6,007	30	79

BOY=Beginning of Year GWI=Goodwill Impairment * Any differences in totals are due to rounding.

79
Companies

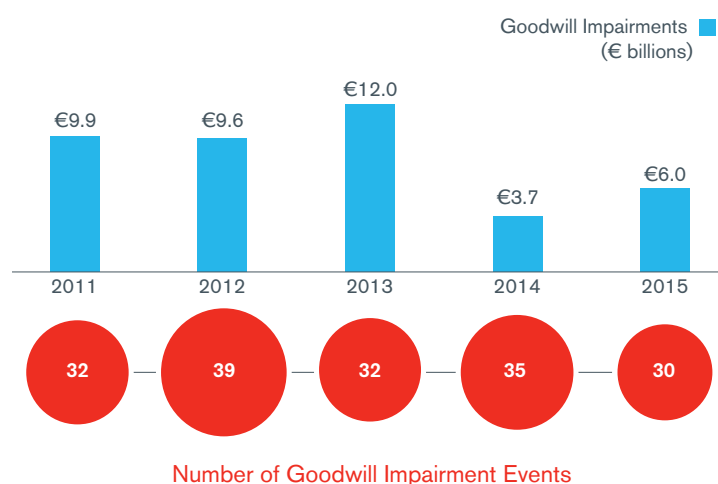
4.3%
Goodwill to Total
Assets (GW/TA)

1.7%
Percent of
Goodwill Impaired
(GWI/GW ratio)

98.7%
Companies
with Goodwill

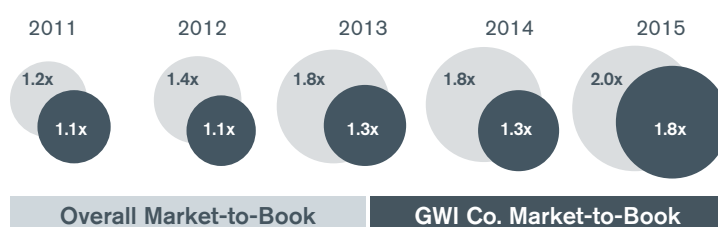
38.5%
Percent of
Companies with
Goodwill that
Recorded a Goodwill
Impairment in 2015

2.0
Market-to-Book
Ratio (median)



Top 3 Goodwill Impairments in France (in millions)

ENGIE SA.....	€ 2,628
BNP Paribas SA.....	€ 993
Klepierre SA.....	€ 923 [†]



[†] Klepierre SA has applied the fair value model under IAS 40 *Investment Property* and has disclosed goodwill impairment figures for investment properties both on a cost and on a fair value basis. For purposes of this study, we have included the figure reported on a fair value basis.

2015 Country Spotlights



		Energy	Materials	Industrials	Consumer Discretionary	Consumer Staples	Healthcare	Financials	Information Technology	Telecomm. Services	Utilities	Total
Number of Companies		–	9	12	10	3	7	11	4	2	2	60
Goodwill Impairments € millions (number of events)	2015	–	€ 26 (1)	€ 2 (1)	€ 36 (2)	€ 457 (1)	€ 4 (2)	€ 5,556 (3)	€ 0 0	€ 43 (1)	€ 5,492 (2)	€ 11,615 (13)
	5-Year Avg.	–	€ 148 (3)	€ 80 (1)	€ 141 (3)	€ 153 (1)	€ 27 (2)	€ 1,671 (2)	€ 16 (1)	€ 1,353 (1)	€ 1,619 (1)	€ 5,207 (16)
Percentage of Companies with Goodwill	2015	–	89%	83%	90%	100%	100%	91%	75%	100%	100%	90%
	5-Year Avg.	–	75%	97%	91%	85%	100%	91%	72%	100%	100%	89%
Goodwill Intensity (Goodwill / Total Assets)	2015	–	17%	8%	5%	21%	35%	1%	43%	11%	10%	5%
	5-Year Avg.	–	15%	14%	4%	17%	31%	1%	38%	13%	11%	4%
Percentage of Companies with Goodwill that Recorded a Goodwill Impairment	2015	–	13%	10%	22%	33%	29%	30%	0%	50%	100%	24%
	5-Year Avg.	–	45%	13%	30%	40%	25%	33%	21%	70%	70%	31%

Goodwill impairments for German companies reached a €11.6 billion historic high in 2015. This was in contrast to the overall performance of the German economy, which was still on a solid growth path in 2015. Real GDP grew by 1.7%, compared with 1.6% in 2014, reflecting strong exports and satisfactory consumer spending. In 2015, capital markets were more volatile than in the year before, but with stock markets still pretty close to all-time highs by year-end, and interest rates at historic low levels.

The €11.6 billion aggregate goodwill impairment was recorded by German companies that were part of the STOXX® Europe 600 in 2015; this is not only the highest amount over the last 5 years, but also in excess of eight times the figure of the previous year. It also represents the highest figure ever recorded in Germany, since the adoption of IFRS by the European Union in 2005. Additionally, compared to other European countries in the study, Germany is at the top of the list in 2015 in both aggregate goodwill impairments and goodwill intensity (at 4.7% of total assets, and excluding countries in the “Other” category).

A more detailed review reveals that the jump was influenced by two companies recognising disproportionately high amounts of goodwill impairment. Leaving those two events aside, the remaining 2015 figure

is below the previous year's level. Both major impairment events are linked to the crises in the respective sectors: German Utilities continue to suffer from the shift towards renewable energy and a more decentralised production, whereas the Financials industry has been negatively impacted by tightened regulations and low interest rates.

The increased amount of goodwill impairment is also in contrast to the number of goodwill impairment events. Only 13 out of the 60 German companies in the STOXX® Europe 600 recorded impairments, which is the lowest figure over the last five years. In general, this reflects the financially healthy state of German companies.

Companies in Information Technology still show the highest goodwill load, representing 43% of their total assets in 2015, followed by Healthcare with 35%. This ratio reflects not only the ongoing M&A activity in these industries over the years, but also a business model with a fairly lean asset base.

In 2016, the goodwill impairment risks appear to have diminished again. German corporates at this point only show a minor impact from the economic downturn in a number of regions around the globe where they operate.

- Ingo Schneemann, Managing Director, Frankfurt, Germany office

2015 Country Spotlights



Goodwill impairments
(€ millions)



	Market Cap	Goodwill BOY	Distribution of GWI Events (Scaled to Size)	Total GWI	GW Events	# of Companies
Consumer Discretionary	€ 318,140	€ 37,700		€ 36	2	10
Financials	206,785	29,808		5,556	3	11
Healthcare	200,945	53,528		4	2	7
Industrials	151,326	36,030		2	1	12
Materials	150,906	33,500		26	1	9
Information Technology	119,637	22,140		-	0	4
Telecomm. Services	80,229	15,830		43	1	2
Consumer Staples	69,912	11,780		457	1	3
Utilities	24,514	23,319		5,492	2	2
Energy	-	-		-	0	0
Total*	€ 1,322,394	€ 263,637		€ 11,615	13	60

BOY=Beginning of Year GWI=Goodwill Impairment * Any differences in totals are due to rounding.

60
Companies

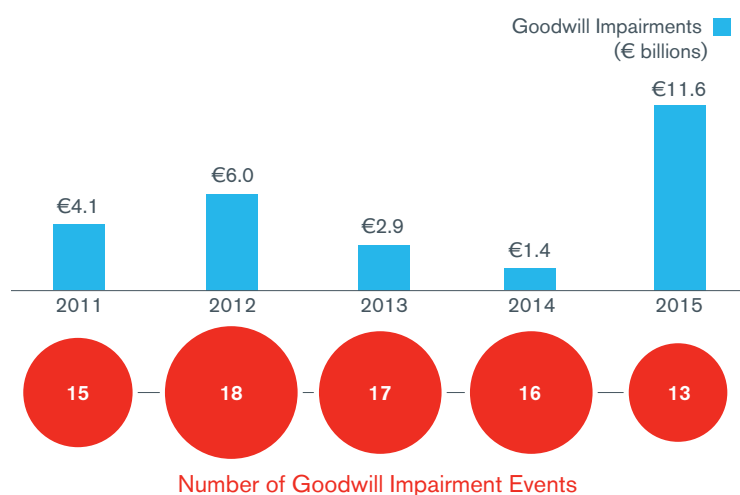
4.7%
Goodwill to Total Assets (GW/TA)

4.4%
Percent of Goodwill Impaired (GWI/GW ratio)

90.0%
Companies with Goodwill

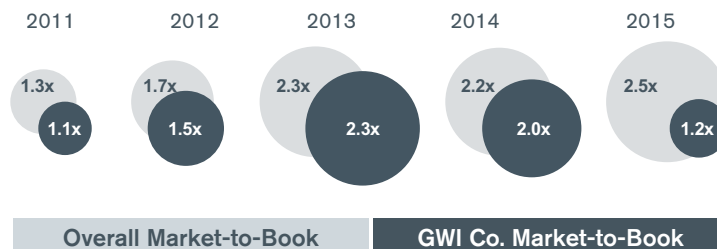
24.1%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

2.5
Market-to-Book Ratio (median)



Top 3 Goodwill Impairments in Germany (in millions)

E.ON SE.....	€ 5,486 [†]
Deutsche Bank AG.....	€ 4,933
METRO AG.....	€ 457



[†] Includes € 700 million impairment on goodwill recognized within a disposal group.

2015 Country Spotlights



		Energy	Materials	Industrials	Consumer Discretionary	Consumer Staples	Healthcare	Financials	Information Technology	Telecomm. Services	Utilities	Total
Number of Companies		1	0	6	1	2	1	10	1	2	4	28
Goodwill Impairments € millions (number of events)	2015	€ 169 (1)	€ 0 0	€ 739 (3)	€ 0 0	€ 0 0	€ 0 0	€ 447 (4)	€ 0 0	€ 104 (1)	€ 0 0	€ 1,459 (9)
	5-Year Avg.	€ 37 (1)	€ 0 0	€ 254 (1)	€ 0 0	€ 0 (1)	€ 0 0	€ 623 (4)	€ 0 0	€ 104 (0)	€ 54 (0)	€ 1,072 (7)
Percentage of Companies with Goodwill	2015	100%	0%	100%	100%	100%	100%	100%	100%	100%	75%	96%
	5-Year Avg.	100%	40%	100%	100%	77%	100%	93%	100%	100%	73%	91%
Goodwill Intensity (Goodwill / Total Assets)	2015	5%	0%	8%	1%	13%	37%	1%	35%	18%	8%	3%
	5-Year Avg.	4%	1%	8%	2%	18%	34%	1%	35%	20%	9%	3%
Percentage of Companies with Goodwill that Recorded a Goodwill Impairment	2015	100%	0%	50%	0%	0%	0%	40%	0%	50%	0%	33%
	5-Year Avg.	50%	0%	25%	0%	60%	0%	44%	0%	30%	7%	28%

The Spanish economy enjoyed a favourable year in 2015, with a 3.2% real GDP growth rate, stronger than what was observed by many other European countries. The local economy benefited from a general cyclical upturn in the Eurozone, supported by low oil prices and the QE measures adopted by the ECB. According to the Bank of Spain, this robust growth was attributable to the strength of private consumption and business investment.

Recent data indicators point to a slight slowdown in the local economy, with IMF projected real GDP growth at 3.1% in 2016, decelerating to 2.2% in 2017, as the factors that supported growth of disposable income in recent years (i.e., the decline in oil prices and improving financial conditions) gradually abate. As a result, bank lending, especially to small and medium enterprises (SME), and public spending have decreased recently, while employment growth has slowed down.

Spain continues to be beset by political uncertainty, but the economic recovery is projected to continue in upcoming periods, although at a more moderate rate. Low borrowing rates, as well as the still-low oil and other commodity prices, are expected to continue to boost consumption.

The 2016 Study covers the 28 Spanish companies that were members of the STOXX® Europe 600 at year-end 2015. For these Spanish companies, goodwill impairments reached €1.5 billion in 2015. This is

significantly higher than the aggregate impairments recorded in each of the previous three years. Besides company-specific factors that led to certain impairments, investments in Latin America, especially in Brazil and Puerto Rico, were negatively impacted by the local macroeconomic environment, which contributed to some of the goodwill impairment events in 2015.

While 33% of those Spanish companies in the study that carry goodwill recognised goodwill impairments, the Top 3 events account for nearly 80% of the aggregate impairment amount. From an industry perspective, we note that the number of events is similarly concentrated, with Financials and Industrials together representing 78% of the impairment events (or 7 events) and 81% of the impairment amount (or €1.2 billion). It is also worth noting that, within Industrials, infrastructure-focused businesses were negatively affected by impairments, due to an adverse regulatory environment for a number of Spanish motorway concessions.

At the other end of the spectrum, no events were observed either in the Healthcare or in the Information Technology industries, in spite of being among those with the highest Goodwill Intensity ratio, with goodwill accounting for 37% and 35% of total assets respectively.

- Javier Zoido, Managing Director, Madrid, Spain office

2015 Country Spotlights



Goodwill impairments (€ millions)



	Market Cap	Goodwill BOY	Distribution of GWI Events (Scaled to Size)	Total GWI	GWI Events	# of Companies
Financials	€ 172,229	€ 41,816		€ 447	4	10
Utilities	76,497	13,331		-	0	4
Industrials	62,136	10,534		739	3	6
Other	203,159	31,825		273	2	8
Total*	€ 514,022	€ 97,506		€ 1,459	9	28

BOY=Beginning of Year GWI=Goodwill Impairment * Any differences in totals are due to rounding.

28
Companies

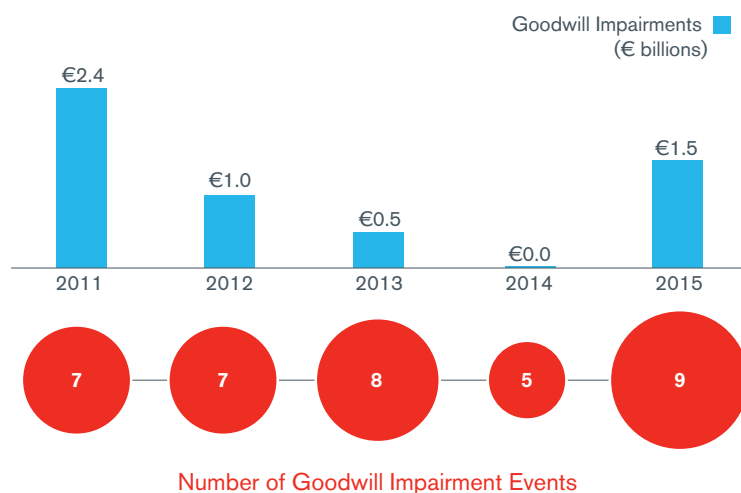
2.7%
Goodwill to Total Assets (GW/TA)

1.5%
Percent of Goodwill Impaired (GWI/GW ratio)

96.4%
Companies with Goodwill

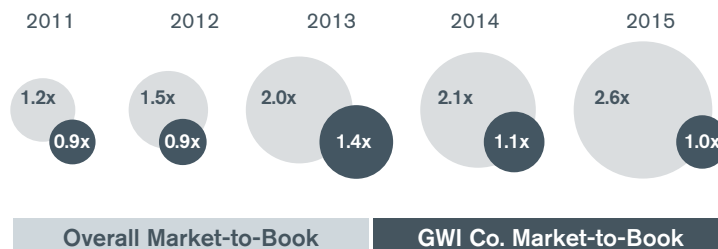
33.3%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

2.6
Market-to-Book Ratio (median)



Top 3 Goodwill Impairments in Spain (in millions)

Abertis Infraestructuras S.A.	€ 682
Merlin Properties Socimi, S.A.	€ 302
Repsol, S.A.	€ 169



2015 Country Spotlights

 United Kingdom

		Energy	Materials	Industrials	Consumer Discretionary	Consumer Staples	Healthcare	Financials	Information Technology	Telecomm. Services	Utilities	Total
Number of Companies		8	16	38	35	12	7	43	12	5	7	183
Goodwill Impairments € millions (number of events)	2015	€ 1,306 (5)	€ 753 (4)	€ 1,587 (12)	€ 1,340 (10)	€ 421 (2)	€ 0 0	€ 1,389 (12)	€ 85 (1)	€ 0 0	€ 827 (1)	€ 7,708 (47)
	5-Year Avg.	€ 402 (3)	€ 4,062 (4)	€ 1,047 (9)	€ 773 (9)	€ 726 (2)	€ 29 (0)	€ 1,786 (10)	€ 31 (1)	€ 5,894 (2)	€ 218 (2)	€ 14,967 (41)
Percentage of Companies with Goodwill	2015	75%	69%	97%	83%	67%	86%	79%	100%	80%	86%	84%
	5-Year Avg.	76%	69%	95%	81%	63%	97%	73%	93%	69%	86%	80%
Goodwill Intensity (Goodwill / Total Assets)	2015	3%	4%	25%	21%	11%	16%	1%	42%	16%	6%	3%
	5-Year Avg.	3%	3%	27%	22%	13%	14%	1%	41%	18%	7%	2%
Percentage of Companies with Goodwill that Recorded a Goodwill Impairment	2015	83%	36%	32%	34%	25%	0%	35%	8%	0%	17%	31%
	5-Year Avg.	41%	30%	28%	32%	29%	3%	33%	9%	60%	26%	29%

Total goodwill impairments in the United Kingdom for 2015 were €7.7 billion, significantly down from 2014 at €12.4 billion, the peak of €23.7 billion in 2012, and below the 5-year average of €15.0 billion. This was driven by the steady performance of the U.K. economy during 2015, which saw overall real GDP growth of 2.2% for the year, albeit lower than the 3.1% achieved in 2014. The 2016 Study covers the 183 U.K.-based companies that were members of the STOXX® Europe 600 at year-end 2015.

With the economy remaining strong, M&A activity in 2015 returned to pre-crisis levels, with both value and volume the highest since 2007 and 2008, respectively. This drove higher deal multiples and P/E ratios for listed companies over the course of the year. Impairments were therefore likely to have been confined to individual deals where synergies were not delivered or where the underlying risks were not fully factored into the original deal prices, including for example, underperformance of foreign-based operations.

As we had forecast in last year's study, companies in the Energy industry saw a spike in impairments, from €0.4 billion in 2014 to €1.3 billion in 2015, with approximately 83% of companies that carry goodwill in the sector recording goodwill impairments. This has clearly been driven by the collapse in oil prices, with Brent crude oil dropping 34% from \$58 at the start of 2015 to around \$38 at year-end. Oil prices have recovered to around \$50 thus far in 2016, but are still far below the peak level of \$115 reached in mid-2014. We would therefore expect the impairment risk in

Energy to remain somewhat high in 2016. Goodwill impairments in the Industrials and Utilities sectors were also impacted by the low oil and gas price environment, increasing in 2015 to €1.6 billion and €0.8 billion, respectively, from €1.2 billion and €0.1 billion in 2014.

Interestingly, the Telecommunication Services industry recorded no impairments in 2015. Historically, this industry has accounted for over a third of total goodwill impairments in the United Kingdom, with the 5-year average for the sector at €5.9 billion, compared to €15.0 billion overall for the U.K.

Following the Brexit vote in June 2016, real GDP growth expectations have been downgraded significantly for the next two years. For example, Oxford Economics revised its estimates from 1.8% in 2016, 2.3% in 2017, and 2.2% in 2018 prior to the Brexit vote, to 2.1%, 1.4% and 1.2%, respectively, based on a recent report update. This is likely to put pressure on all industries in the latter part of the year, as goodwill impairment testing calculations should reflect the more uncertain business environment in the projected cash flows of cash-generating units (CGUs). The increasing prospect of a "Hard Brexit" will further heighten impairment risks, particularly for businesses acquired before the vote, where the impact of Brexit was likely not factored into the price or expected cash flows. Following Brexit, M&A activity has also declined, affecting multiples and further increasing impairment risk. The United Kingdom is expected to experience a very interesting year in 2017.

- Michael Weaver, Managing Director, London, U.K. office

2015 Country Spotlights

United Kingdom

Goodwill impairments
(€ millions)



	Market Cap	Goodwill BOY	Distribution of GWI Events (Scaled to Size)	Total GWI	GWI Events	# of Companies
Financials	€ 643,330	€ 51,865		€ 1,389	12	43
Consumer Staples	540,963	47,316		421	2	12
Consumer Discretionary	315,663	17,625		1,340	10	35
Energy	280,814	15,090		1,306	5	8
Industrials	250,371	53,436		1,587	12	38
Healthcare	232,421	18,552		-	0	7
Materials	186,007	50,248		753	4	16
Telecomm. Services	146,853	32,744		-	0	5
Utilities	105,172	11,223		827	1	7
Information Technology	68,774	6,860		85	1	12
Total*	€ 2,770,368	€ 304,958		€ 7,708	47	183

BOY=Beginning of Year GWI=Goodwill Impairment * Any differences in totals are due to rounding.

183
Companies

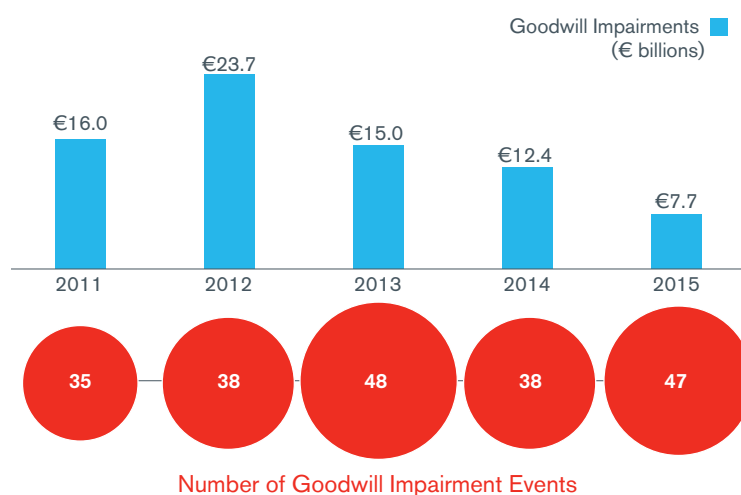
2.6%
Goodwill to Total Assets (GW/TA)

2.5%
Percent of Goodwill Impaired (GWI/GW ratio)

83.6%
Companies with Goodwill

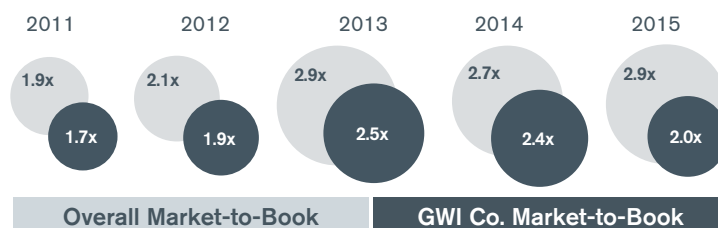
30.7%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

2.9
Market-to-Book Ratio (median)



Top 3 Goodwill Impairments in the UK (in millions)

Pearson plc	€ 1,122 (£826)
Centrica plc	€ 827 (£609)
The Royal Bank of Scotland Group plc	€ 676 (£498)



Industry Spotlights

Industry Spotlights cover ten industries, providing an in-depth focus on their relevant metrics and statistics. Each Spotlight displays a variety of data, including the top three companies in the 2016 Study that recognised the highest amount of goodwill impairment within each industry for calendar year 2015.

The guide below provides a brief description of the components of the Industry Spotlights.

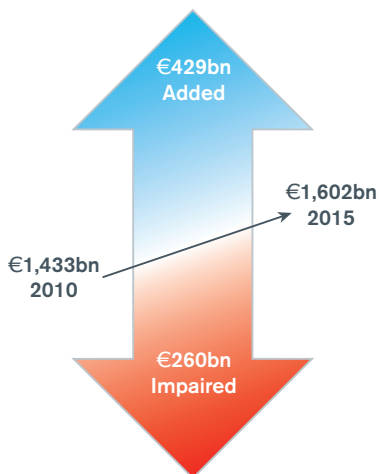


* Because companies regularly move into and out of the STOXX® Europe 600 Index (the typical annual churn rate is approximately 40 companies), this comparison does not include the same set of companies every year, which may slightly distort the figures presented for goodwill trends. In addition, two industries with a relatively small number of companies in the STOXX® Europe 600 Index—Utilities and Telecommunication Services—have suffered from some of the largest goodwill impairments over the 2011-2015 period relative to the overall STOXX® Europe 600 Index, while some of the index constituents also disposed of businesses (with associated goodwill) to other companies outside the index. As a result, the magnitude of goodwill impairments and disposals has outstripped goodwill additions through acquisitions made by companies in these two industries. Combined, these factors have depressed the year-end goodwill balance for both industries, which helps explain why Utilities appears to have a negative goodwill addition of €2 billion over the 2010-2015 period (see Utilities Spotlight), whereas Telecommunication Services appears to have a negative €7 billion goodwill addition (see Telecommunication Services Spotlight). Should this graphic be prepared using only companies that were part of the STOXX® Europe 600 Index during the entire 2010-2015 period, there would be a small increase (net addition) of goodwill to these industries' aggregate balance sheets.

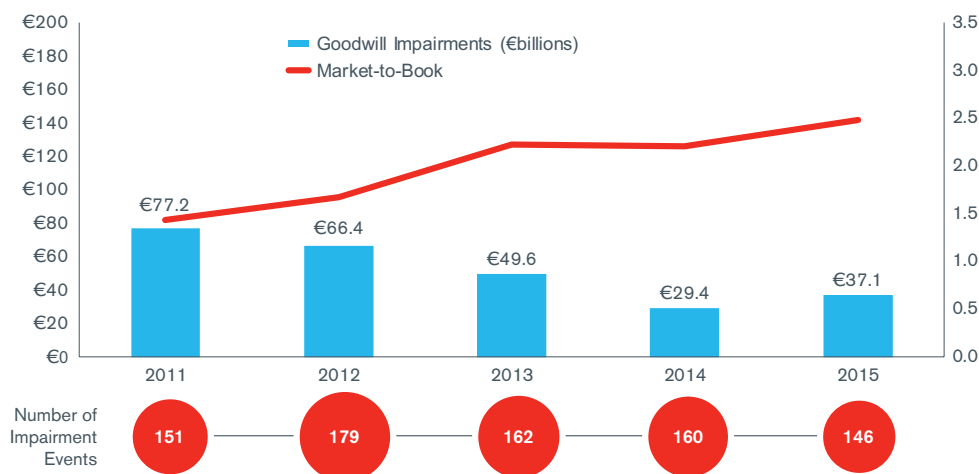
† STOXX® Europe 600 industry sub-indices are constructed by the index provider for ten industries based on the Industry Classification Benchmark. This is a different industry classification from that used throughout the 2016 Study, which is based on GICS codes. Although the industry definitions are broadly similar, the naming convention is slightly different. For example, in the Energy spotlight we show the performance of the STOXX® Europe 600 Oil & Gas sub-index.

2015 Composite Industry Spotlight

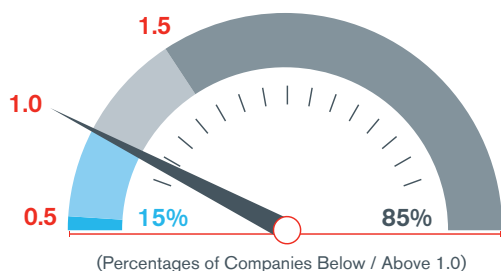
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



588
Companies

3.7%
Goodwill to Total Assets (GW/TA)

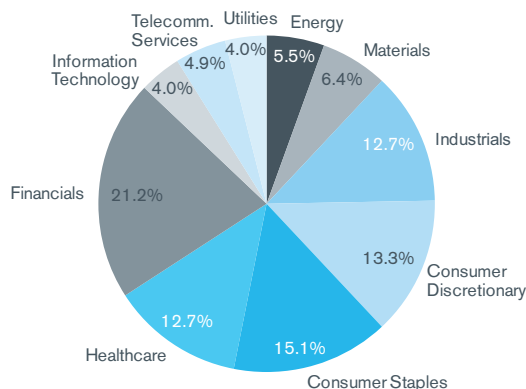
2.4%
Percent of Goodwill Impaired (GWI/GW ratio)

90.3%
Companies with Goodwill

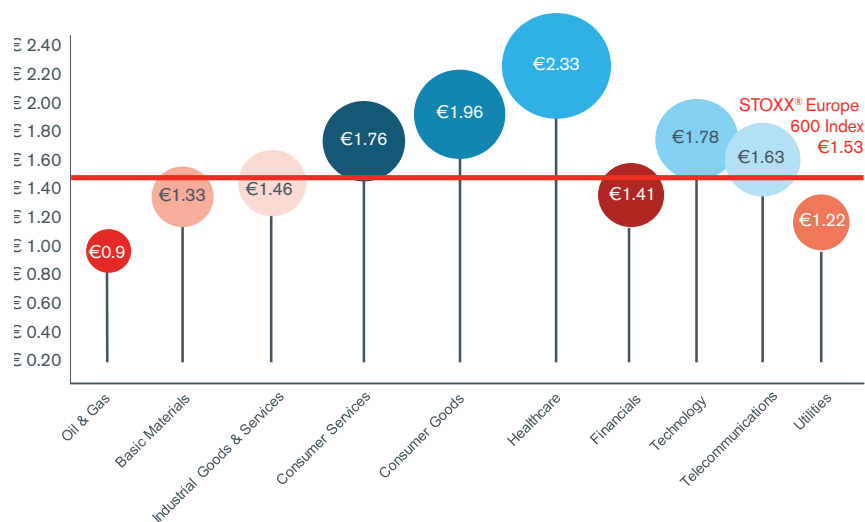
27.5%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

2.5
Market-to-Book Ratio (median)

Size of Industry (Relative to Study's Total Market Cap)



Index (Year End 2010 = €1)



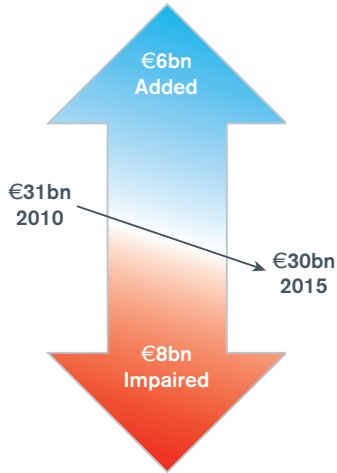
Top 3 Industry Goodwill Impairments (in millions)

E.ON SE	€ 5,486
Deutsche Bank AG	€ 4,933
Credit Suisse Group AG	€ 3,492 (CHF 3,797)

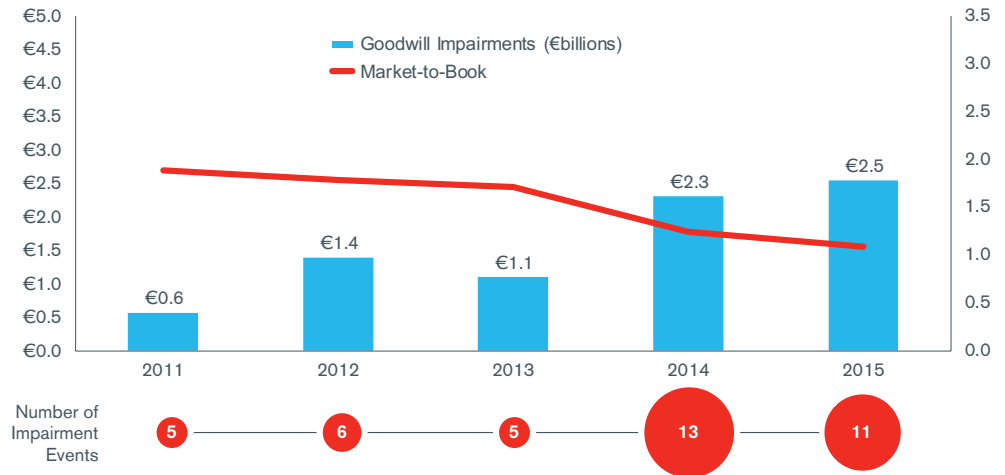
2015 Industry Spotlight

Energy
GICS Code 10

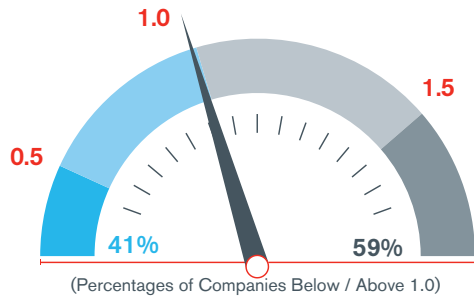
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



23
Companies

2.3%
Goodwill to Total Assets
(GW/TA)

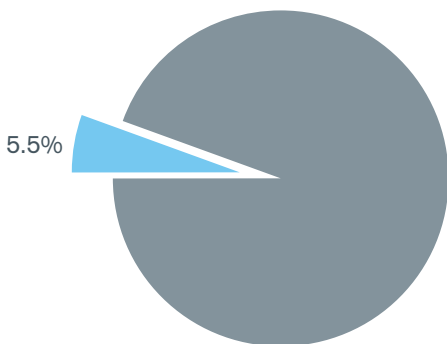
8.9%
Percent of Goodwill
Impaired (GWI/GW ratio)

87.0%
Companies with
Goodwill

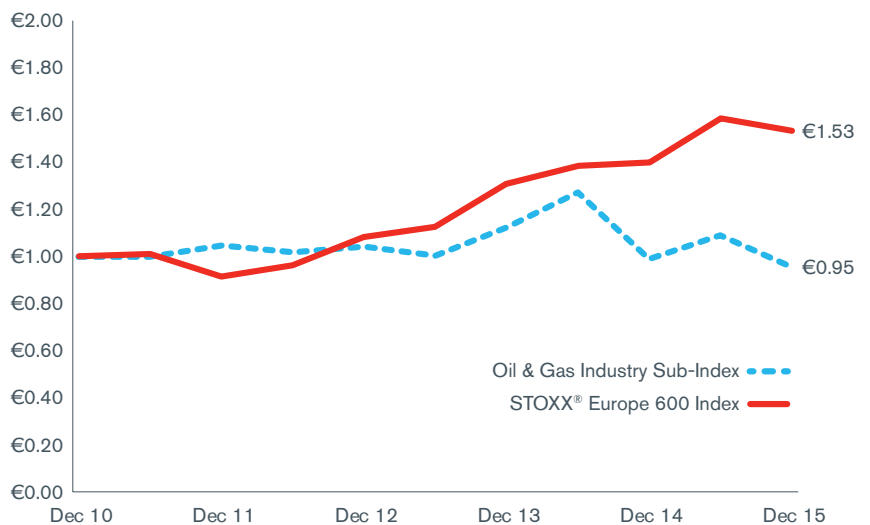
55.0%
Percent of Companies
with Goodwill that
Recorded a Goodwill
Impairment in 2015

1.1
Market-to-Book Ratio
(median)

Size of Industry (Relative to Study's Total Market Cap)



Index (Year End 2010 = €1)



Top 3 Industry Goodwill Impairments (in millions)

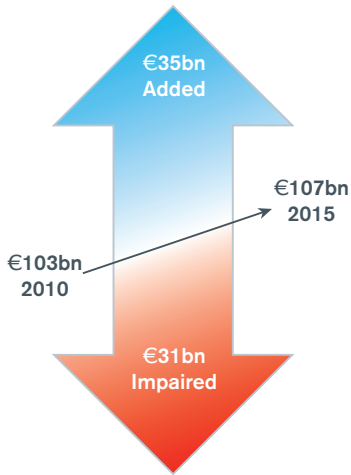
SeaDrill Limited	€ 518 (\$563)
Subsea 7 SA.....	€ 480 (\$521)
Amec Foster Wheeler plc.....	€ 418 (£308)

2015 Industry Spotlight

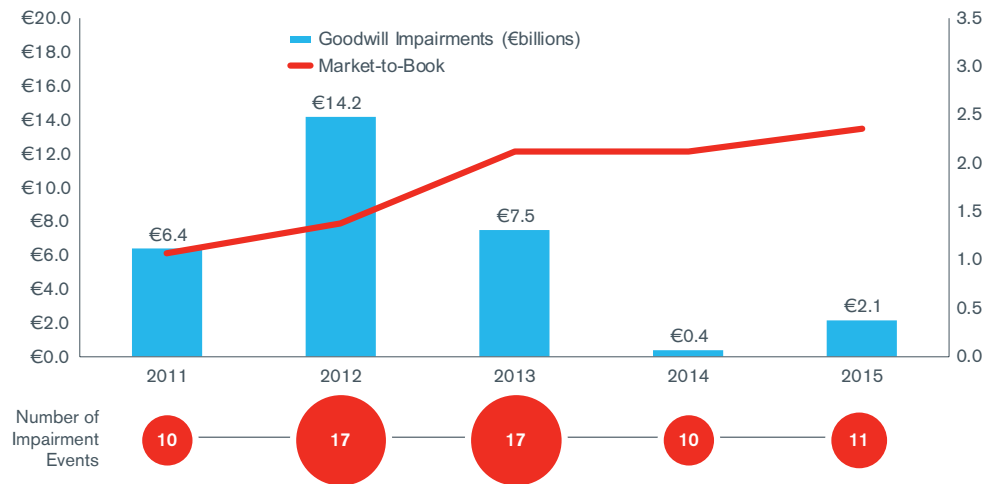
Materials

GICS Code 15

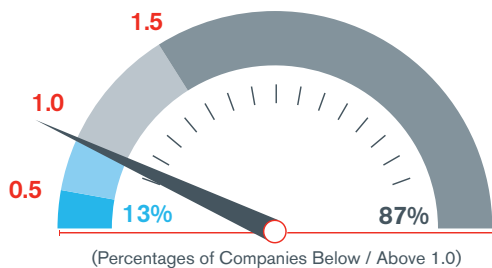
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



53
Companies

10.5%
Goodwill to Total Assets (GW/TA)

2.1%
Percent of Goodwill Impaired (GWI/GW ratio)

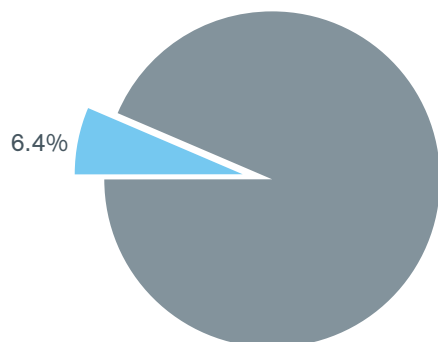
88.7%
Companies with Goodwill

23.4%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

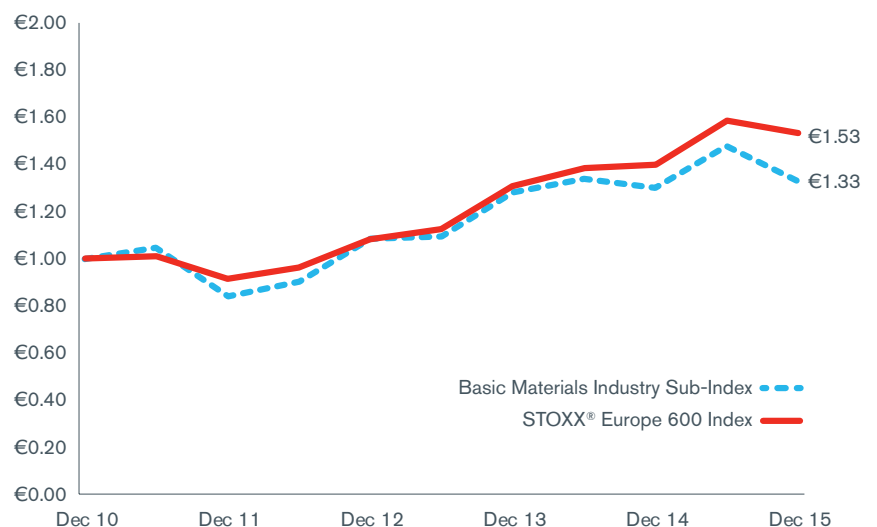
2.4
Market-to-Book Ratio (median)

Size of Industry

(Relative to Study's Total Market Cap)



Index (Year End 2010 = €1)



Top 3 Industry Goodwill Impairments (in millions)

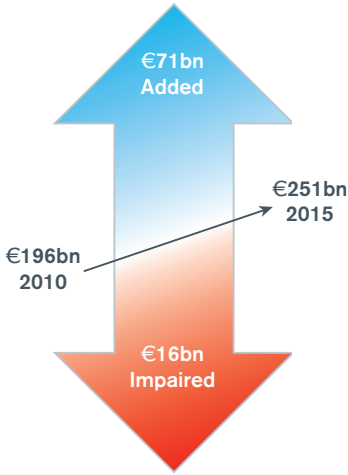
ArcelorMittal	€ 786 (\$854)
BHP Billiton plc	€ 499 (\$542)
OCI N.V.	€ 389 (\$423)

2015 Industry Spotlight

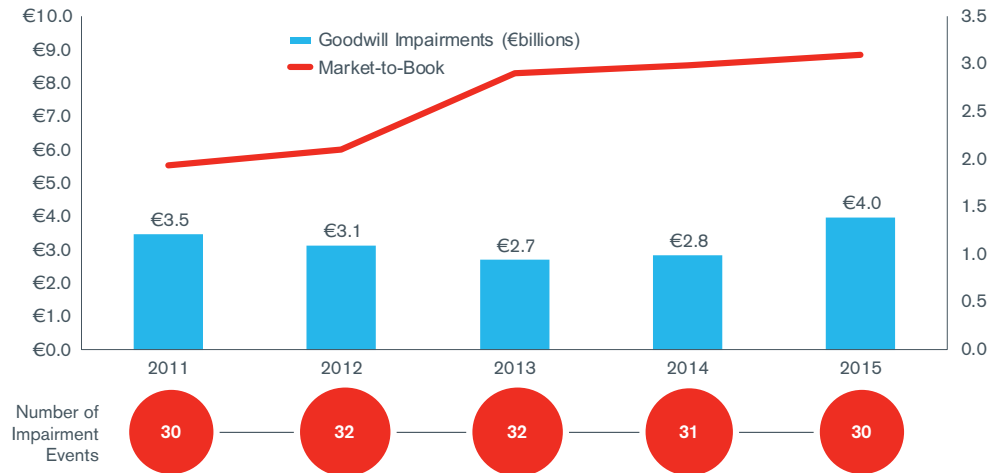
Industrials

GICS Code 20

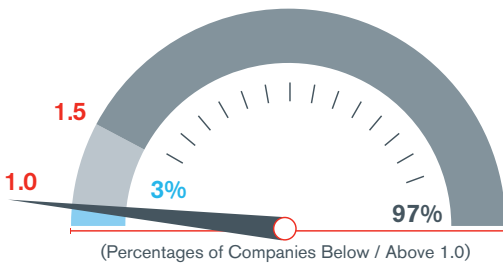
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



127
Companies

15.5%
Goodwill to Total Assets (GW/TA)

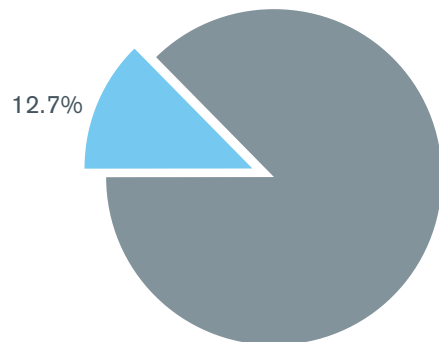
1.7%
Percent of Goodwill Impaired (GWI/GW ratio)

94.5%
Companies with Goodwill

25.0%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

3.1
Market-to-Book Ratio (median)

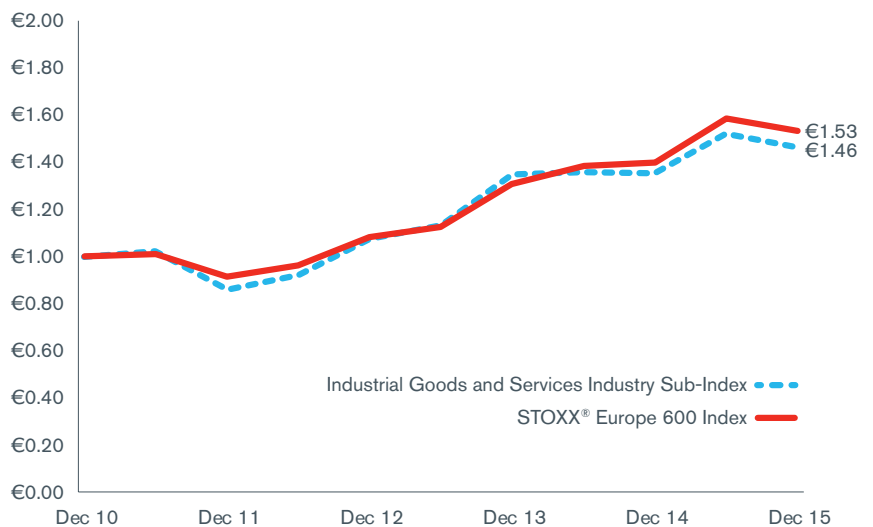
Size of Industry (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

Adecco Group AG	€ 740
Abertis Infraestructuras S.A.	€ 682
Intertek Group plc	€ 654 (£481)

Index (Year End 2010 = €1)

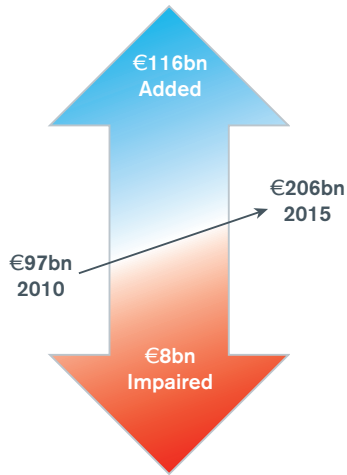


2015 Industry Spotlight

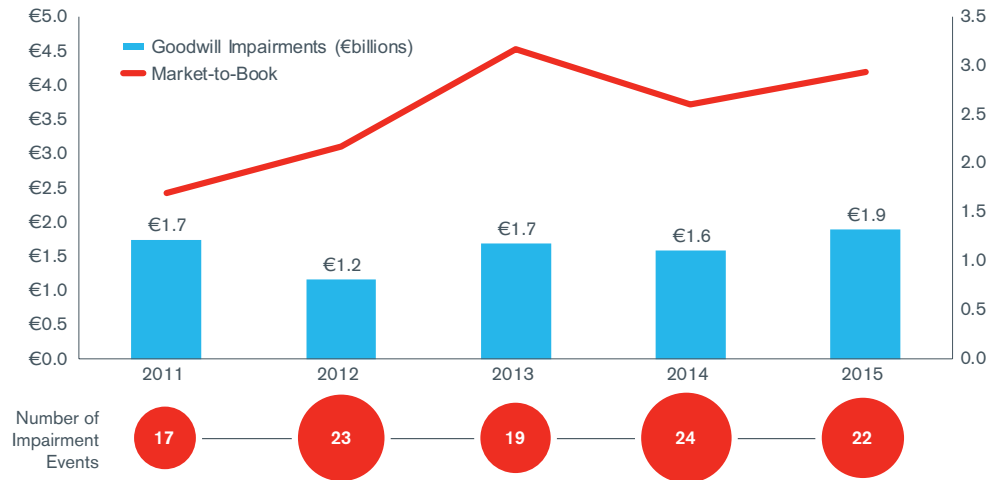
Consumer Discretionary

GICS Code 25

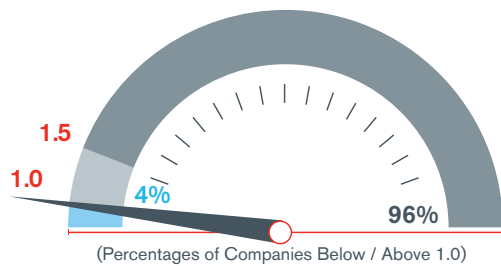
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



86
Companies

11.1%
Goodwill to Total Assets (GW/TA)

1.0%
Percent of Goodwill Impaired (GWI/GW ratio)

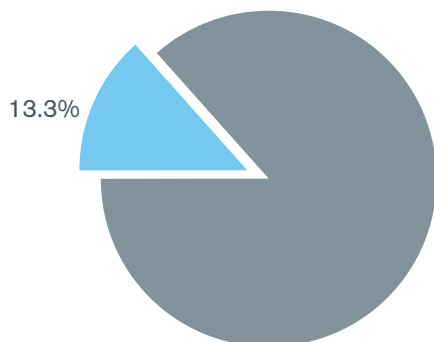
90.7%
Companies with Goodwill

28.2%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

2.9
Market-to-Book Ratio (median)

Size of Industry

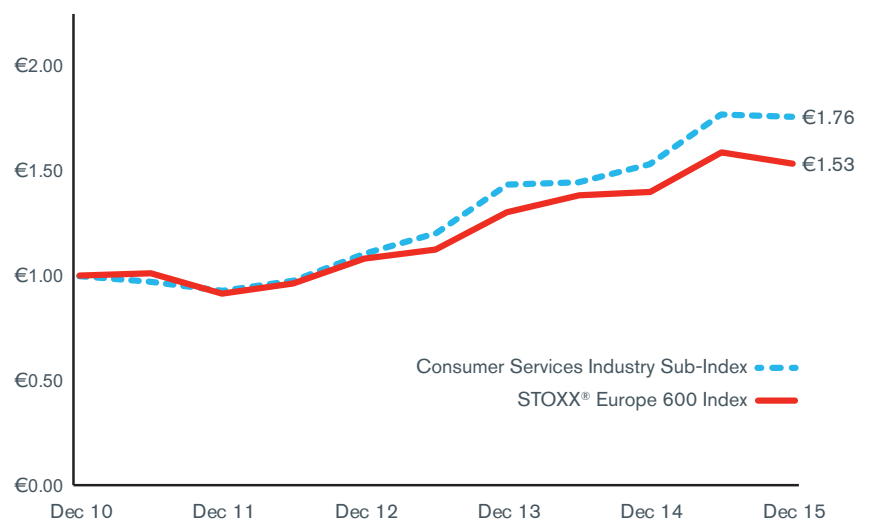
(Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

Pearson plc	€ 1,122 (£826)
Kering SA	€ 150
Christian Dior SE	€ 116

Index (Year End 2010 = €1)

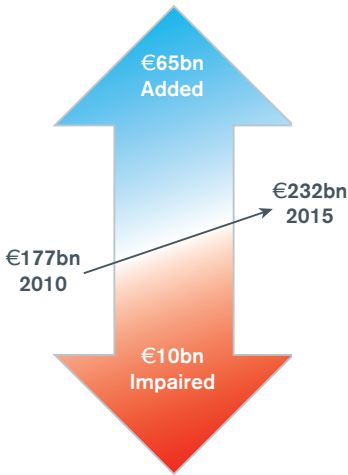


2015 Industry Spotlight

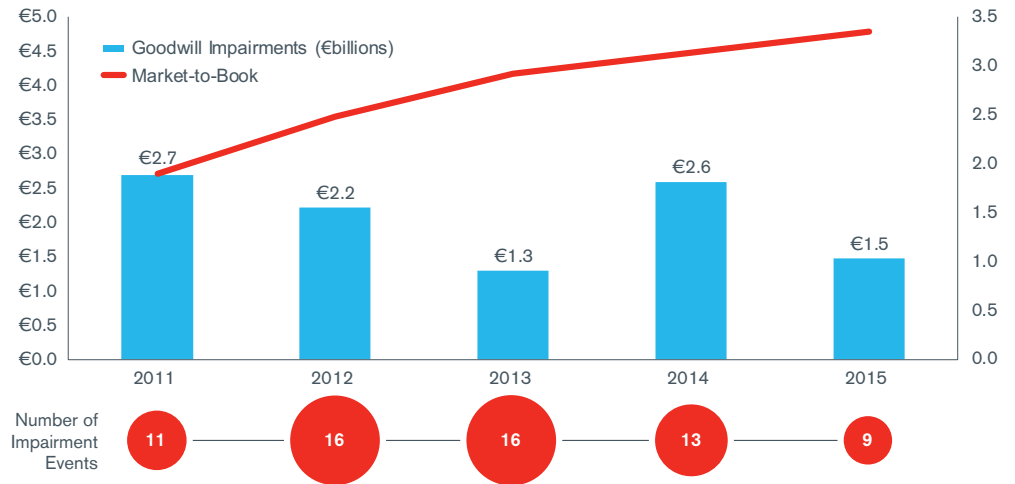
Consumer Staples

GICS Code 30

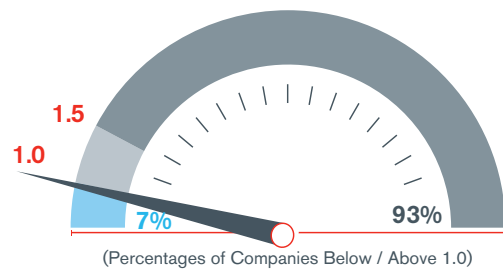
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



44
Companies

23.0%
Goodwill to Total Assets (GW/TA)

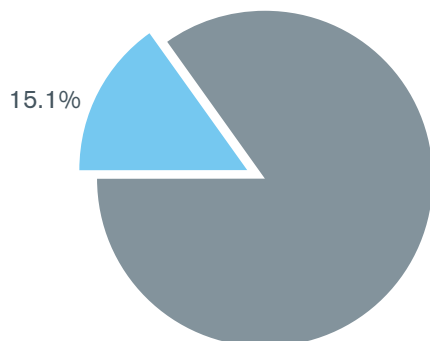
0.6%
Percent of Goodwill Impaired (GWI/GW ratio)

86.4%
Companies with Goodwill

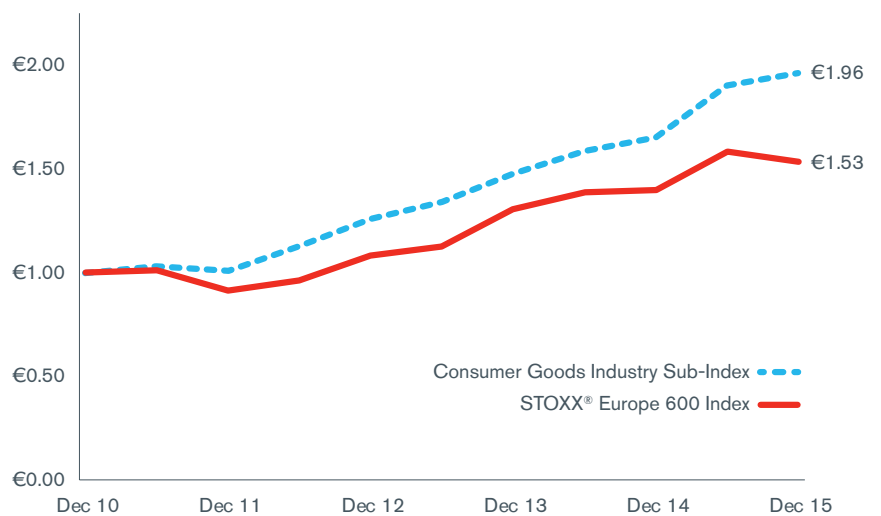
23.7%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

3.3
Market-to-Book Ratio (median)

Size of Industry (Relative to Study's Total Market Cap)



Index (Year End 2010 = €1)



Top 3 Industry Goodwill Impairments (in millions)

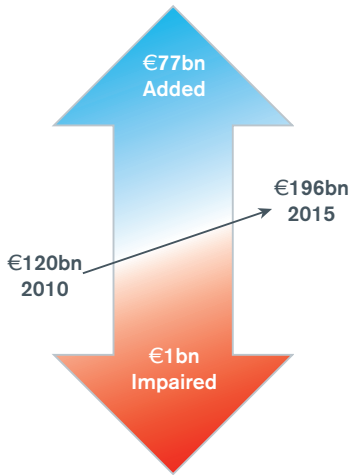
METRO AG	€ 457
Nestlé S.A.	€ 311 (CHF 338)
SABMiller plc	€ 263 (\$286)

2015 Industry Spotlight

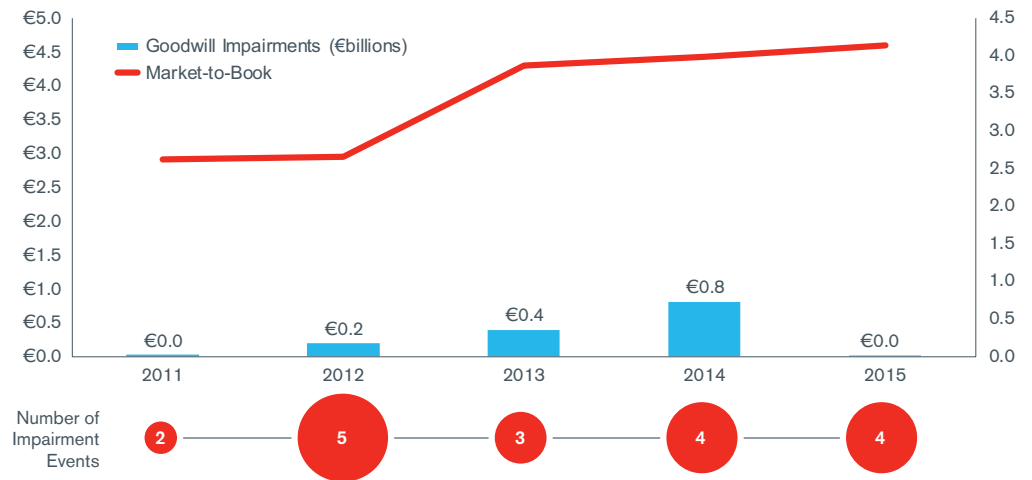
Healthcare

GICS Code 35

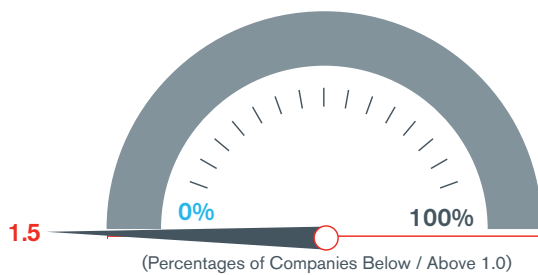
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



39
Companies

26.9%
Goodwill to Total Assets (GW/TA)

0.0%
Percent of Goodwill Impaired (GWI/GW ratio)

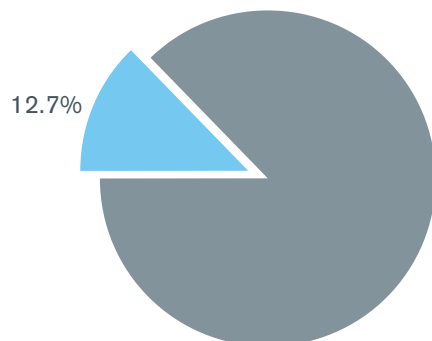
89.7%
Companies with Goodwill

11.4%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

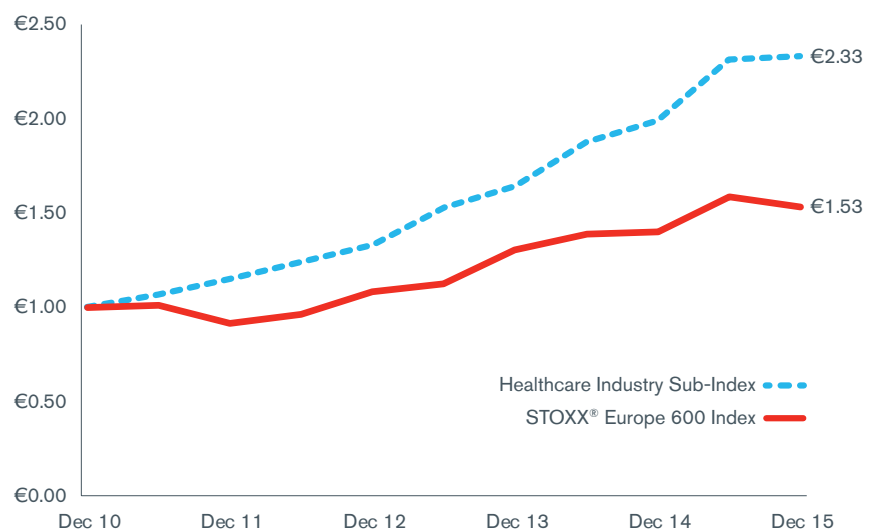
4.1
Market-to-Book Ratio (median)

Size of Industry

(Relative to Study's Total Market Cap)



Index (Year End 2010 = €1)



Top 3 Industry Goodwill Impairments (in millions)

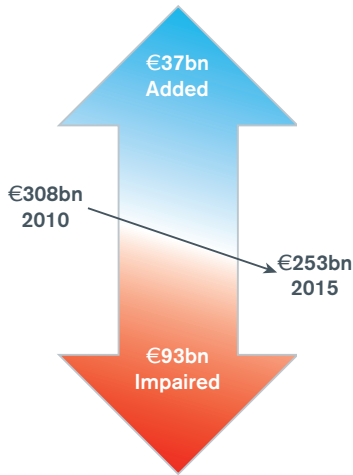
Eurofins Scientific SE	€ 11
Essilor International SA	€ 5
Morphosys AG	€ 4

2015 Industry Spotlight

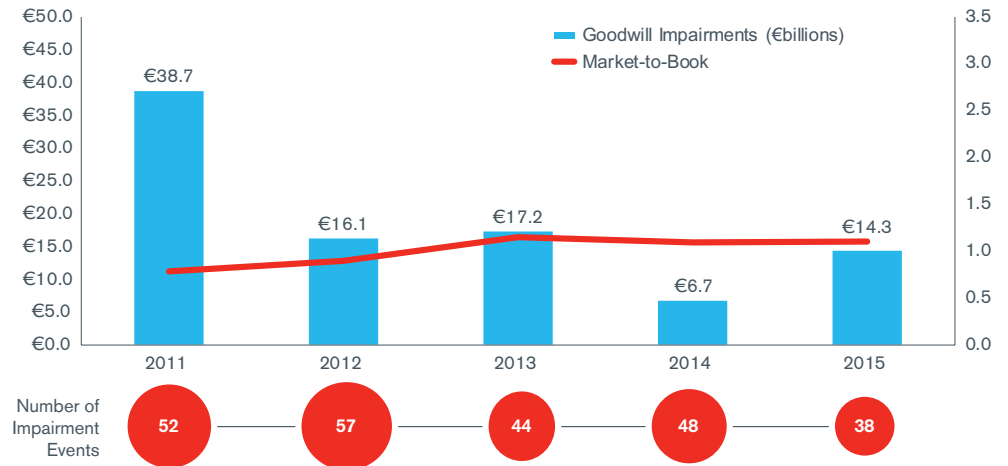
Financials

GICS Code 40

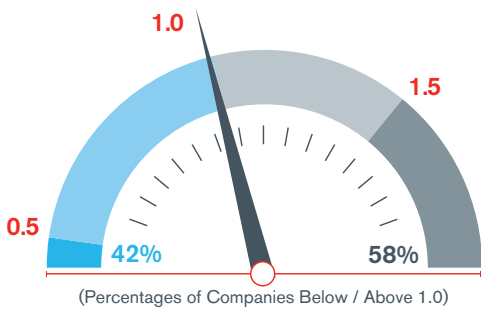
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



135
Companies

0.8%
Goodwill to Total Assets (GW/TA)

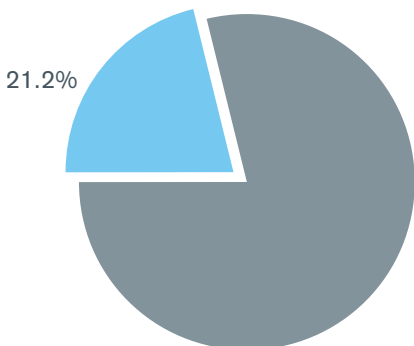
5.6%
Percent of Goodwill Impaired (GWI/GW ratio)

86.7%
Companies with Goodwill

32.5%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

1.1
Market-to-Book Ratio (median)

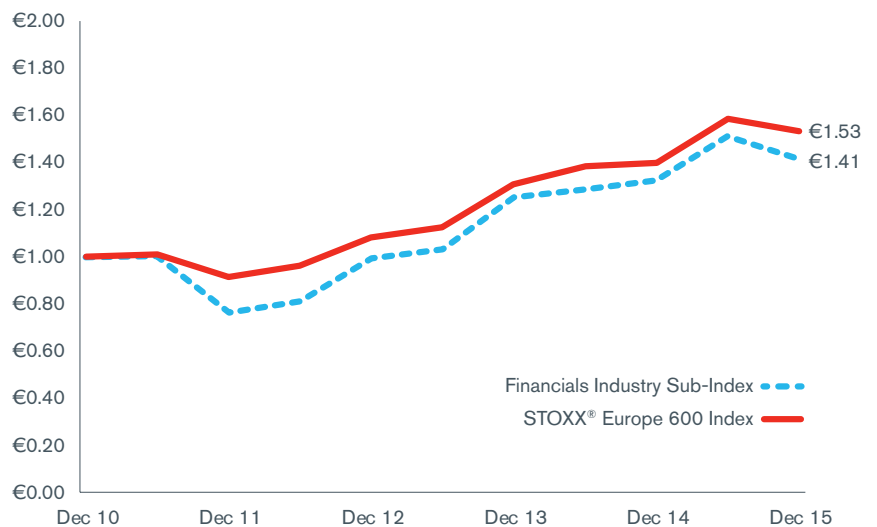
Size of Industry (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

Deutsche Bank AG.....	€ 4,933
Credit Suisse Group AG	€ 3,492 (CHF 3,797)
BNP Paribas SA.....	€ 993

Index (Year End 2010 = €1)

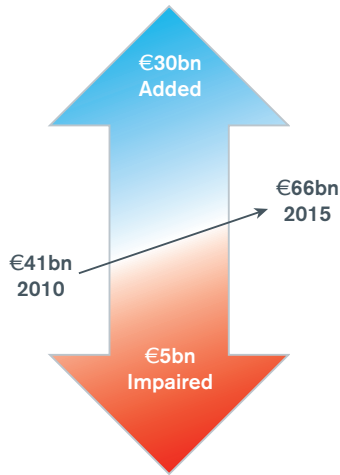


2015 Industry Spotlight

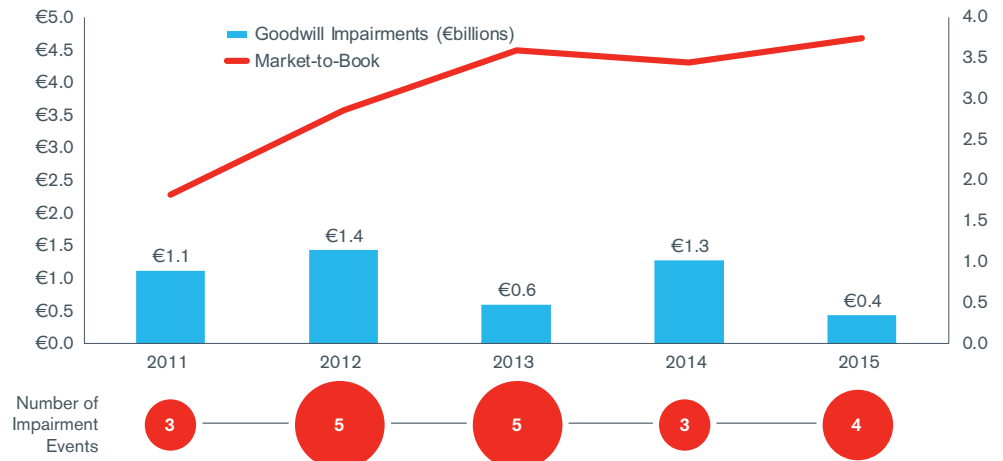
Information Technology

GICS Code 45

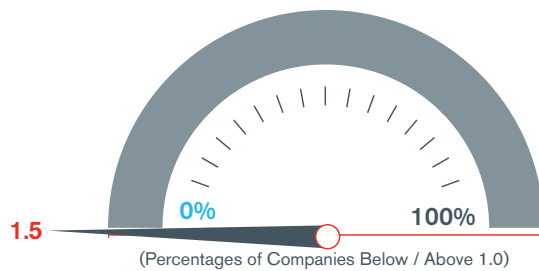
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



34
Companies

27.5%
Goodwill to Total Assets (GW/TA)

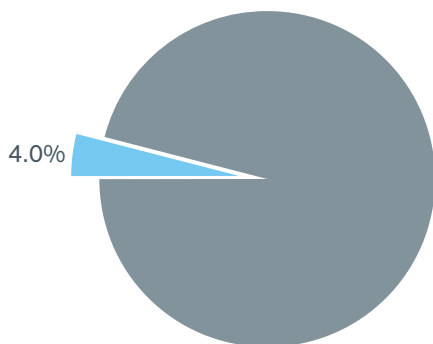
0.7%
Percent of Goodwill Impaired (GWI/GW ratio)

94.1%
Companies with Goodwill

12.5%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

3.7
Market-to-Book Ratio (median)

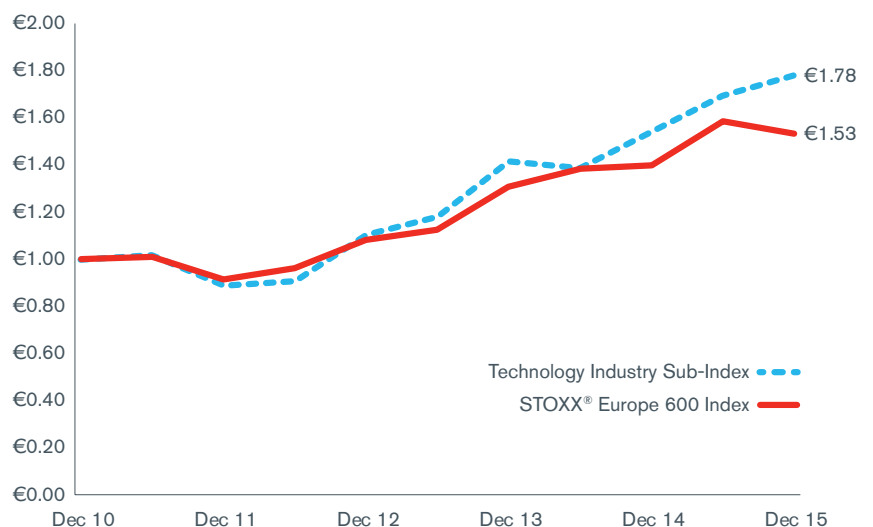
Size of Industry (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

Alcatel-Lucent.....	€ 193
Logitech International SA.....	€ 113 (\$123)
Sage Group plc.....	€ 85 (£62)

Index (Year End 2010 = €1)

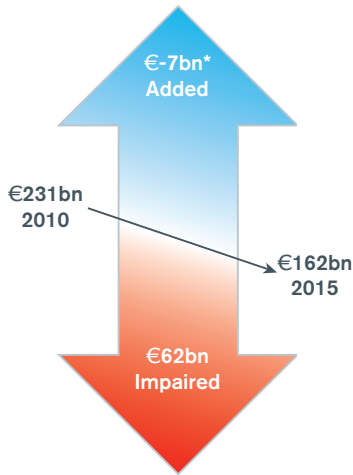


2015 Industry Spotlight

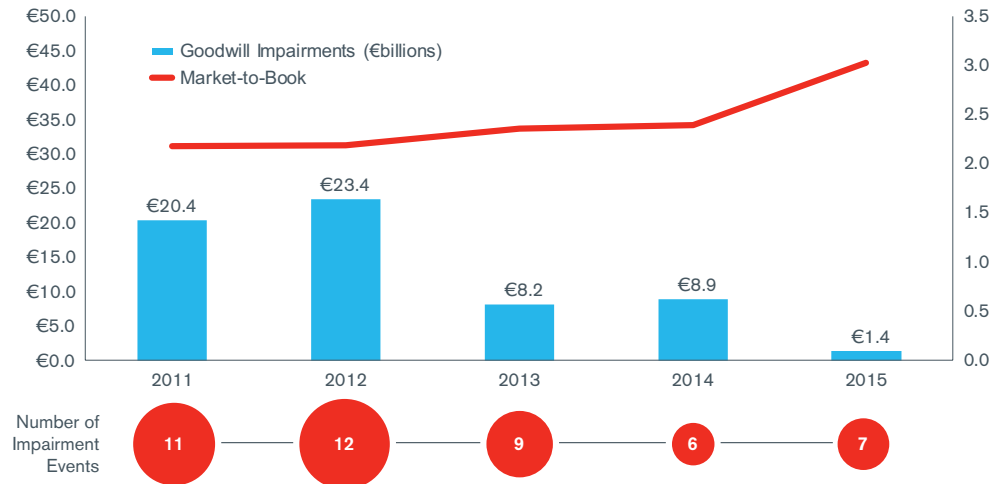
Telecommunication Services

GICS Code 50

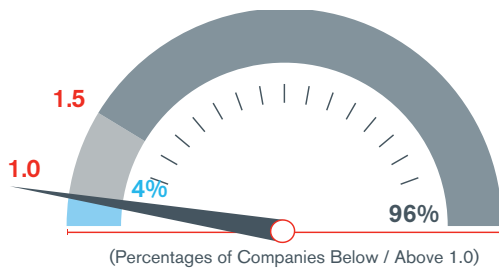
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



23
Companies

20.1%
Goodwill to Total Assets (GW/TA)

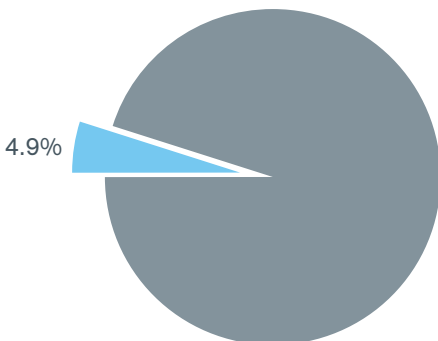
0.9%
Percent of Goodwill Impaired (GWI/GW ratio)

95.7%
Companies with Goodwill

31.8%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

3.0
Market-to-Book Ratio (median)

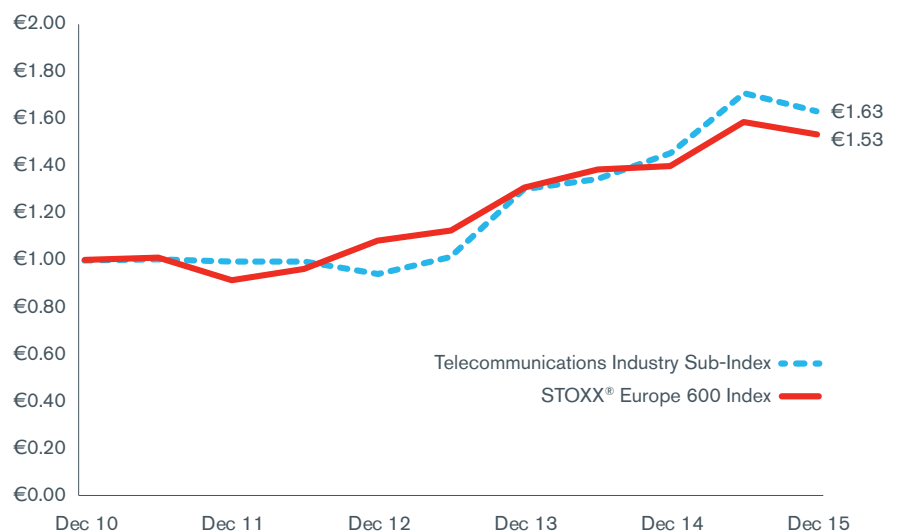
Size of Industry (Relative to Study's Total Market Cap)



Top 3 Industry Goodwill Impairments (in millions)

TDC A/S	€ 555 (DKK 4,144)
Telia Company AB	€ 385 (SEK 3,528)
Telecom Italia S.p.A.	€ 262

Index (Year End 2010 = €1)



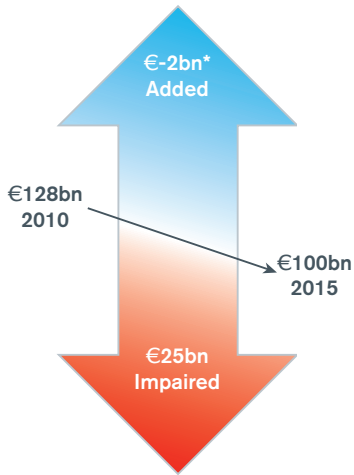
* The decrease in the amount of goodwill added is due to the combined effect of: (i) the change in the composition of the index over the period; and (ii) the magnitude of goodwill impairments and disposals outstripping goodwill additions through acquisitions.

2015 Industry Spotlight

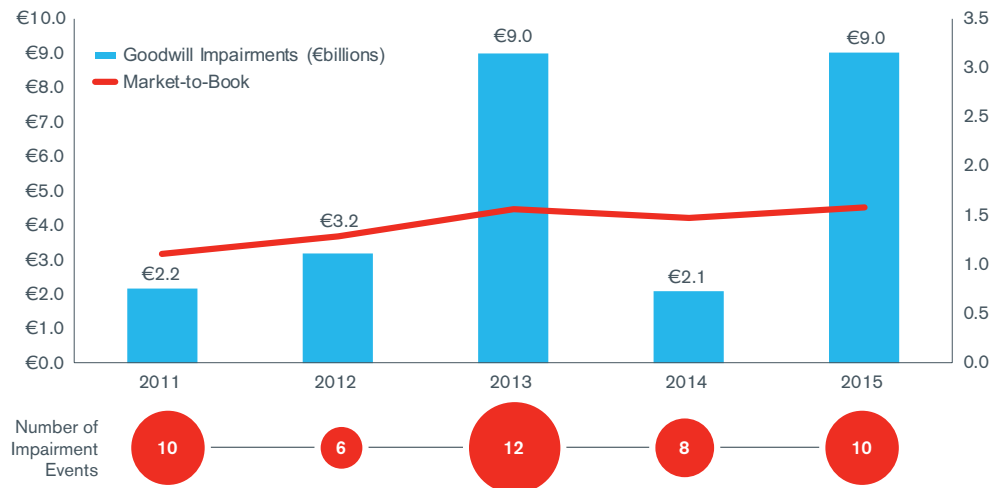
Utilities

GICS Code 55

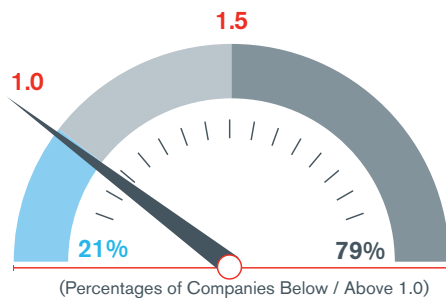
Goodwill Trends 2010 – 2015



Impairment History



Market-to-Book Ratio Distribution (Based on Number of Companies)



24
Companies

7.5%
Goodwill to Total Assets (GW/TA)

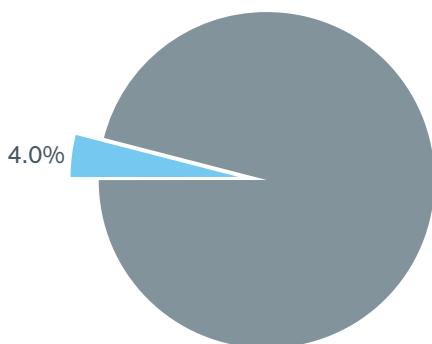
8.6%
Percent of Goodwill Impaired (GWI/GW ratio)

91.7%
Companies with Goodwill

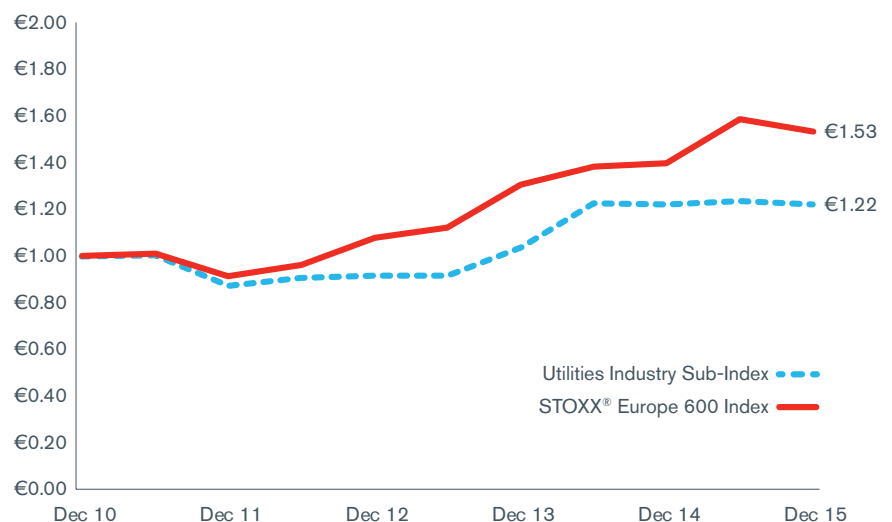
45.5%
Percent of Companies with Goodwill that Recorded a Goodwill Impairment in 2015

1.6
Market-to-Book Ratio (median)

Size of Industry (Relative to Study's Total Market Cap)



Index (Year End 2010 = €1)



Top 3 Industry Goodwill Impairments (in millions)

E.ON SE.....	€ 5,486
ENGIE SA.....	€ 2,628
Centrica plc.....	€ 827 (£609)

* The decrease in the amount of goodwill added is due to the combined effect of: (i) the change in the composition of the index over the period; and (ii) the magnitude of goodwill impairments and disposals outstripping goodwill additions through acquisitions.

Goodwill Impairments by Sub-Industry

Calendar Year 2015

Goodwill Intensity:

- Goodwill to Total Assets (GW/TA)

Loss Intensity:

- Goodwill Impairment to Goodwill (GWI/GW)

List of Industries by Industry Group, as defined by Global Industry Classification Standard (GICS)

GICS Code	GICS Industry Group Name	Number Co.'s	% of Co.'s with GW	GW/TA	GWI/GW	% of Co's with GW that Recorded GWI	Goodwill Impairment (in € billions)	Market-to-Book Ratio
							€ 2.5 (industry group total)	
1010	Energy	23	87.0%	2.3%	8.9%	55.0%	€ 2.5	1.1
							€ 2.1 (industry group total)	
1510	Materials	53	88.7%	10.5%	2.1%	23.4%	€ 2.1	2.4
							€ 3.9 (industry group total)	
2010	Capital Goods	75	94.7%	15.2%	0.9%	26.8%	€ 1.6	2.7
2020	Commercial and Professional Services	28	96.4%	35.8%	5.2%	33.3%	€ 1.6	5.3
2030	Transportation	24	91.7%	8.4%	2.2%	9.1%	€ 0.7	3.0
							€ 1.9 (industry group total)	
2510	Automobiles and Components	11	100.0%	4.3%	0.1%	27.3%	€ 0.0	1.5
2520	Consumer Durables and Apparel	22	81.8%	12.9%	1.5%	44.4%	€ 0.5	2.7
2530	Consumer Services	18	88.9%	18.9%	0.0%	6.3%	€ 0.0	4.8
2540	Media	22	100.0%	30.7%	1.5%	27.3%	€ 1.3	2.7
2550	Retailing	13	84.6%	13.6%	1.4%	36.4%	€ 0.1	3.5
							€ 1.5 (industry group total)	
3010	Food and Staples Retailing	14	100.0%	12.4%	1.9%	21.4%	€ 0.6	1.8
3020	Food, Beverage and Tobacco	24	75.0%	27.1%	0.6%	27.8%	€ 0.8	3.8
3030	Household and Personal Products	6	100.0%	25.8%	0.0%	16.7%	€ 0.0	4.6
							€ 0.0 (industry group total)	
							€ 0.0 (industry group total)	
3510	Health Care Equipment and Services	12	91.7%	42.6%	0.0%	9.1%	€ 0.0	4.1
3520	Pharmaceuticals, Biotechnology and Life Sciences	27	88.9%	24.1%	0.0%	12.5%	€ 0.0	4.1
							€ 14.0 (industry group total)	
4010	Banks	41	95.1%	0.6%	2.5%	28.2%	€ 3.3	0.9
4020	Diversified Financials	34	88.2%	1.2%	14.7%	30.0%	€ 8.7	1.8
4030	Insurance	35	100.0%	0.9%	1.6%	28.6%	€ 1.0	1.2
4040	Real Estate	25	52.0%	1.9%	63.5%	61.5%	€ 1.3	1.1
							€ 0.4 (industry group total)	
4510	Software and Services	18	100.0%	43.0%	0.3%	11.1%	€ 0.1	5.3
4520	Technology Hardware and Equipment	9	88.9%	16.1%	1.8%	25.0%	€ 0.3	3.0
4530	Semiconductors and Semiconductor Equipment	7	85.7%	11.1%	0.0%	0.0%	€ 0.0	3.1
							€ 1.4 (industry group total)	
5010	Telecommunication Services	23	95.7%	20.1%	0.9%	31.8%	€ 1.4	3.0
							€ 9.0 (industry group total)	
5510	Utilities	24	91.7%	7.5%	8.6%	45.5%	€ 9.0	1.6

Appendix 1:

Company Base Set Selection and Methodology

The 2016 Study focused on financial data for companies in the STOXX® Europe 600 Index for the period 2011-2015. The primary sources of data for the 2016 Study were S&P Global's Capital IQ database and individual company annual and interim financial reports.* The following procedures were used to arrive at the 2016 Study dataset, which was used to calculate all ratios and summary statistics throughout the 2016 Study:

- The 2016 Study used index constituents at the end of calendar year 2015 to form the annual dataset.†
- The dataset was assessed each year to identify any index constituents with a controlling interest in another constituent company, because in such cases the controlling investor (the parent) would have consolidated the underlying entity's (the subsidiary's) financial results. To avoid double-counting the parent's and the subsidiary's reported financial information (including recorded impairments), we excluded the financial results of any subsidiary companies in the index that met this criterion. We also excluded duplicates within the index that are dual listed on European exchanges.‡
- Financial data for all companies in the 2015 Study was adjusted, when applicable, to a calendar year end (rather than the most recent fiscal year end) to examine impairments over a specific period of time, regardless of company-specific choices of fiscal year.
- Finally, to allow for comparison of goodwill impairment amounts across companies, countries, and industries, the financial data for each company in the index with a non-euro reporting currency was translated into euros using the foreign exchange rate assumptions listed in Appendix 2 to this report. Regardless of fiscal year-end choices, for simplicity and comparability reasons, goodwill impairments (and other financial metrics) were translated into euros using the applicable spot foreign exchange rate as of 31 December of the applicable year, with a few exceptions.§

The resulting dataset was used to calculate all ratios and summary statistics throughout the 2016 Study.

* Although most of the companies in the STOXX® Europe 600 Index prepare financial statements in accordance with IFRS, some use other accounting standards, such as Swiss GAAP or U.S. GAAP. Neither the 2016 Study nor prior years' studies have made any adjustments for differences in accounting standards applied by companies within the index. Generally, since only a small proportion of the companies in the index do not use IFRS, the inclusion of those companies did not have a material impact on the statistics reported in prior years' studies. However, in the 2016 Study, the share of the total goodwill impairment amount represented by non-IFRS filers was more meaningful relative to previous years. Specifically, in calendar 2015, the 15 companies within the dataset filing under either U.S. or Swiss GAAP accounted for 13% of the 2015 aggregate goodwill impairment amount. Nevertheless, nearly three-quarters of that figure was driven by a single large impairment event by a Swiss company in the Financial Services industry. Other countries and industries in the 2016 Study are therefore minimally impacted.

† Source: Bloomberg. The index is reviewed regularly for component changes and is typically adjusted on a quarterly basis. In 2013, the methodology was enhanced to utilise index members as of the end of the year. To keep the information consistent with the 2013 Study, the information for 2011-2012 was still collected based on index members at the beginning of each calendar year (e.g. 1 January 2011 for the 2011 list).

‡ This analysis resulted in the elimination of 13, 12, 9, 9 and 12 companies from the dataset in 2011, 2012, 2013, 2014, and 2015, respectively. Consequently, Tables 1-4 show that 2015 statistics were computed for 588 companies (600 companies in the STOXX® Europe 600 Index, less the 12 that were eliminated from the dataset).

§ Because of the fiscal year-end to calendar year-end adjustment, goodwill impairment amounts for some companies were calculated using financial results across different fiscal years. In such cases, spot foreign exchange rates corresponding to the appropriate fiscal year-end dates were used to convert the impairment amounts into euros.

Appendix 2:

Foreign Exchange Rate Assumptions

Year	Currency	Per €1	Year	Currency	Per €1
2015	CHF	1.087	30/9/2015	GBP	0.738
	CZK	27.020	30/6/2015	GBP	0.708
	DKK	7.463	31/3/2015	GBP	0.723
	GBP	0.736	31/12/2014	GBP	0.777
	NOK	9.614	30/09/2014	GBP	0.778
	SEK	9.168	30/06/2014	GBP	0.800
	USD	1.086	31/03/2014	GBP	0.827
2014	CHF	1.202	03/11/2013	GBP	0.847
	DKK	7.447	14/09/2013	GBP	0.837
	GBP	0.777	30/09/2013	GBP	0.836
	NOK	9.056	31/08/2013	GBP	0.853
	SEK	9.471	30/04/2013	GBP	0.846
	USD	1.210	31/03/2013	GBP	0.844
	2013	CHF	1.226	23/02/2013	GBP
DKK		7.460	31/01/2013	GBP	0.857
GBP		0.831	31/03/2012	GBP	0.834
NOK		8.364	30/09/2011	GBP	0.860
SEK		8.853	30/04/2011	GBP	0.889
USD		1.377	31/03/2011	GBP	0.884
2012		CHF	1.207	31/01/2011	GBP
	DKK	7.461	30/09/2010	GBP	0.865
	GBP	0.811	31/07/2010	GBP	0.831
	NOK	7.341	30/04/2010	GBP	0.868
	SEK	8.585	31/03/2010	GBP	0.891
	USD	1.319			
	2011	CHF	1.214		
DKK		7.433			
GBP		0.835			
NOK		7.746			
SEK		8.918			
USD		1.299			
2010	CHF	1.253			
	DKK	7.454			
	GBP	0.859			
	NOK	7.802			
	SEK	9.011			
	USD	1.341			

Source: S&P Global's Capital IQ®

Appendix 3:

Overview of IAS 36 Requirements

Recognising Goodwill

Goodwill is defined in IFRS 3 as “an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognised”. Internally generated goodwill cannot be recognised. In a business combination goodwill is measured as follows:*

Purchase price for acquired equity interest
+
Amount of any non-controlling interest in the acquiree
+
Fair value of any previously held equity interest in the acquiree
-
Fair value of acquiree's identifiable net assets
=
Goodwill

Allocating Goodwill to Cash-Generating Units

Goodwill acquired in a business combination is allocated as of the acquisition date to an entity's cash-generating units that are expected to benefit from the synergies of the combination. Goodwill is allocated at the lowest level within the entity at which goodwill is monitored for internal management purposes. A cash generating unit cannot be larger than an operating segment as defined in IFRS 8 *Operating Segments*.

Recognising a Goodwill Impairment Loss

Goodwill is impaired if the recoverable amount of a cash-generating unit is less than its carrying amount. The recoverable amount of a cash-generating unit is the higher of its (i) fair value less costs of disposal; and (ii) value in use.†

IFRS 13 provides guidance for measuring fair value and IAS 36 provides guidance for measuring value in use.

Any impairment loss is allocated first to reduce the carrying amount of goodwill of the cash-generating unit (or group of cash-generating units) to zero. Any remaining impairment loss is allocated to the non-monetary assets of the cash generating unit on a pro-rata basis. However, the carrying amount of each asset should not be reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable), or zero. Any unallocated impairment loss is reallocated to the non-monetary assets of the cash-generating unit, subject to the same limits. Once a goodwill impairment has been recognised it cannot be reversed.

Timing of Goodwill Impairment Tests

Goodwill must be tested for impairment at least annually, or more frequently if there are indicators that it may be impaired. Factors indicating that a cash-generating unit may be impaired include, for example:

- Significant adverse changes have occurred during the period in the technological, market, economic or legal environment that have an effect on the entity, indicating that economic performance is or will be worse than expected.
- Market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to decrease the asset's recoverable amount materially.
- The carrying amount of the net assets of the entity is greater than its market capitalisation.

The annual goodwill impairment test for a cash-generating unit to which goodwill has been allocated can be performed at any point throughout the annual period. However, the test must be performed at the same time each year.

* Goodwill is calculated as a residual and is subject to a number of accounting adjustments, such as the recognition of deferred tax liabilities. Non-controlling interests in the acquiree can be measured at either fair value or at the proportionate share of the acquiree's identifiable net assets, based on an election that can be made on a transaction-by-transaction basis.

† From a practical standpoint, it is not always necessary to determine both an asset's (cash-generating unit's) fair value less costs of disposal and its value in use. If either of these amounts exceeds the carrying amount, the entity may conclude that the asset (or cash-generating unit) is not impaired.

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